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EDITORIAL

THE INDICATIONS FOR CHOLECYSTECTOMY

There can be no more difficult problem in surgery than to decide whether cholecystectomy should be performed where laparotomy, undertaken for suspected biliary disease, reveals a gall-bladder devoid of stones. Surgical opinion has never been entirely unanimous on this point. Deaver,¹ Zunk² and Connel³ maintained, indeed, that patients without stones gave better results after cholecystectomy than those in whom calculi were found. On the other hand, Lahey,⁴ Young,⁵ Stanton⁶ and Ross⁷ came to a diametrically opposite conclusion.

Glenn and Mannix⁸ have recently reviewed 135 patients in whom cholecystectomy was performed in the absence of stones. These patients were subjected to operation on the basis of a suggestive history and X-ray findings. At operation, cholecystectomy was performed for a variety of reasons. In some cases the gall-bladder wall was considered to be significantly thickened (an opinion not always shared by the pathologist), in others there were adhesions to neighbouring organs, and in the remainder the gall-bladder, although normal in appearance, was removed because no other condition was found to account for the symptoms. Of the 135 patients 24% were not relieved of their complaints, and in 11% the results were classified as fair. The remaining 65% considered that the operation had benefited them. There were 3 deaths. Somewhat similar findings have been recorded by Whipple⁹ and MacKey.¹⁰

In the pre-operative evaluation of the patient, a clear history of biliary colic is of the greatest importance. Stanton and MacKey are of the opinion that, in estimating the prognosis, the symptom of biliary colic is of greater importance than pathological changes that may be present in the gall-bladder, and Lahey was never deterred from removing a normal-looking gall-bladder if the history strongly indicated biliary disease and medical treatment had failed after a fair trial. Such, however, is the lack of agreement in high places that Judd,¹¹ whose experience in this field is probably unparalleled, has declared that removal of the gall-bladder on the basis of

VAN DIE REDAKSIE

DIE AANDUIDINGS VIR CHOLESISTEKTOMIE

Daar kan geen moeiliker probleem by chirurgie wees as om te besluit of cholestektomie gedoen behoort te word nie waar laparotomie, wat vir 'n verdagte galbuis kwaal uitgevoer is, 'n galblaas sonder stene blootlê. Chirurgiese mening was nog nooit heeltemal eens oor hierdie punt nie. Deaver,¹ Zunk² en Connel³ het inderdaad volgehou dat pasiënte sonder galstene beter resultate lewer na cholestektomie as diegene by wie stene gevind is. Aan die anderkant het Lahey,⁴ Young,⁵ Stanton⁶ en Ross⁷ tot presies die teenoorgestelde gevolgtrekking gekom.

Glenn en Mannix⁸ het onlangs 'n oorsig gelewer oor 135 pasiënte op wie cholestektomie gedoen is sonder dat daar stene aanwesig was. Hierdie pasiënte is aan operasie onderwerp op die basis van 'n suggestiewe geskiedenis en X-straalbevindings. By operasie is cholestektomie om verskeie redes uitgevoer. By sommige gevalle is dit gereken dat daar 'n duidelike verdikking van die galblaaswand was ('n mening waarmee die patoloog nie altyd eens was nie), by ander was daar vergroeiings aan naasliggende organe en by die origes is die galblaas verwyder, alhoewel dit normaal vertoon het, aangesien daar geen ander toestand gevind is om die simptome te verklaar nie. Van die 135 pasiënte het 24% geen verligting van hulle kwale ondervind nie en by 11% is die resultate as taamlik goed geklassifiseer. Die orige 65% het gereken dat hulle deur die operasie gebaat is. Daar was 3 sterfgevälle. Enigsins soortgelyke bevindings is deur Whipple⁹ en MacKey¹⁰ geboekstaaf.

By die voor-operatiewe berekening van die pasiënt is 'n duidelike geskiedenis van galkoliek van die grootste belang. Stanton en MacKey is van sienswyse dat, wanneer die prognose beraam word, die simptome van galkoliek van groter belang is as die patologiese tekens wat by die galblaas aanwesig mag wees, en Lahey het nooit gestuit om 'n galblaas, wat heel normaal vertoon het, te verwyder nie as die geskiedenis sterk op kwale van die galbuis gedui het en mediese behandeling, na 'n redelike kans, nie gehelp het nie. Van so 'n aard is die verskil van mening in hoë kringe dat Judd,¹¹ wie se ondervinding op hierdie gebied waarskynlik ongeëwenaard is, verklaar het dat verwydering van die galblaas op die basis van die kliniese geskiedenis alleen en by die afwesigheid van 'n lokale letsel, swak oordeel aan die kant van die chirurg weerspieël, die operasie oneer aandoen, en dit onwaarskynlik is dat die pasiënt daardeur baat sal ondervind.

...ical history alone, and in the absence of a local lesion, ... a poor judgment on the part of the surgeon, brings ... on the operation, and is unlikely to benefit the ...

In the pre-operative investigation of the patient suspected of suffering from biliary disease, straight X-ray of the gall-bladder region, cholecystography—oral, intravenous or both—and, occasionally, barium meal, are performed as routine procedures, whereas duodenal aspiration, used as a diagnostic measure, appears to have become unfashionable. It is difficult to understand the reason for this since, under certain circumstances, the duodenal aspirate may yield information of much value. In this investigation, the duodenal tube is passed, and concentrated magnesium sulphate is run in through the tube. The bile aspirated from the duodenum is then examined. The presence of pus, blood, bacteria, desquamated epithelium and, above all, cholesterol crystals may indicate gall-bladder disease in cases where the X-rays are doubtful. A negative result is of no significance.

At operation, a careful search should be made for some other condition that might account for the patient's symptoms, especially peptic ulcer, pancreatitis, hiatus hernia, and appendicitis. It may be extremely difficult to decide whether or not the gall-bladder is normal. Characteristically it has a slate-blue appearance, and a loss of this bluish-green translucency is one of the early signs of inflammatory change. The presence of adhesions and thickening of the wall will be duly noted, and finally the gall-bladder is carefully palpated for stones. Small calculi are notoriously difficult to feel, but may be detected more easily after aspiration of the gall-bladder and, should the decision go against the performance of cholecystectomy, all that is required is closure of the needle puncture. The condition of the cystic gland lying in relation to the neck of the gall-bladder, along the cystic artery, may be of assistance. If the gland is normal in size and appearance, the gall-bladder is probably free from significant disease and, by the same token, an enlarged and scarred gland indicates chronic cholecystitis. Warren Cole¹² feels that there are patients with acalculous gall-bladders who have definite disease of the gall-bladder, and who are improved by cholecystectomy. He suggests that in these cases, non-calculous obstruction of the cystic duct occurs through the agency of small bands and nodules which, by partially occluding the cystic duct, provide a situation favourable to the development of chronic cholecystitis.

It is evident that removal of the acalculous gall-bladder should not be lightly undertaken, and the surgeon, writhing in agony on the horns of his dilemma, will be guided by the knowledge that, in the absence of demonstrable pathological changes in the gall-bladder, cholecystectomy is unlikely to benefit his patient and may, if unskillfully performed, cause him irreparable harm. Twenty years ago Guthrie remarked that the surgeon who performed cholecystectomy under these circumstances would never experience any difficulty in following up his patients, since they would follow him with grim determination for the rest of his days!

1. Deaver, J. B. (1925): Surg. Clin. N. Amer., 5, 1516.
2. Zunk, O. C. (1926): Radiology, 6, 286.
3. Connel, F. G. (1928): Ann. Surg., 88, 837.
4. Lahey, F. H. (1927): Boston Med. Surg. J., 196, 677.
5. Young, E. L. (1928): New Engl. J. Med., 198, 729.
6. Stanton, E. MacD. (1932): Amer. J. Surg., 18 (N.S.), 246.
7. Ross, J. C. (1932): Brit. Med. J., 1, 1026.

By die voor-operatiewe ondersoek van die pasiënt, wat vermoedelik aan galbuiskwale ly, word gewone X-strale van die galblaasstreek, cholestistografie—mondelings, binnears, of beide—en, af en toe, bariumaal, as roetine metodes gebruik, terwyl dit skyn of aspirasie van die duodenale inhoud, wat as 'n diagnostiese maatstaf gebruik word, heeltemal uit die mode is. Die rede hiervoor is moeilik te verstaan aangesien die opgesuigde inhoud onder sekere toestande waardevolle inligting mag verskaf. By hierdie ondersoek word die duodenale buis ingesteek en gekonsentreerde magnesiumsulfaat daar deurgelei. Die gal wat van die duodenum opgesuig word, word dan ondersoek. By gevalle waar X-strale twyfelagtig is, mag die aanwesigheid van etter, bloed, bakterieë, afgeskilferde epiteel en, veral, cholestrienkristalle, siekte van die galblaas aandui. 'n Negatiewe X-straalresultaat is van geen belang nie.

By operasie behoort daar sorgvuldig gesoek te word na een of ander toestand wat die pasiënt se simptome mag verklaar, veral peptiese seer, pankreatitis, 'n hiaatbreuk en blinddermonsteking. Dit mag uiters moeilik wees om te besluit of die galblaas normaal is al dan nie. Kenmerkend het dit 'n lei-blou kleur en verlies van hierdie blou-groen deurskynendheid is een van die vroeë tekens van ontsteking. Die aanwesigheid van vergroeiings en verdikking van die wand sal na behore opgemerk word en eindelijk word die galblaas versigtig betas vir stene. Dit is welbekend dat klein steentjies moeilik is om te voel, maar na aspirasie van die galblaas mag dit makliker wees om hulle te vind en indien daar teen die uitvoering van cholestistektomie besluit word, is dit slegs nodig om die gaatjie waar die naald ingesteek is, toe te maak. Die toestand van die sistiese klier, wat naas die nek van die galblaas, langs die sistiese slaagaar geleë is, mag van hulp wees. Indien die klier normaal in grootte en voorkoms is, het die galblaas waarskynlik geen ernstige siekte nie en, op dieselfde wyse, dui 'n vergrootte en gelittekende klier chroniese galblaasontsteking aan. Warren Cole¹² meen dat daar pasiënte met steenlose galblase is wat definitief aan siekte van die galblaas ly en wat baat sal vind by cholestistektomie. Hy gee aan die hand dat by hierdie gevalle, obstruksie van die sistiese buis, ander as deur stene, deur die werking van klein bandjies en knoppies geskied wat, deur die sistiese buis gedeeltelik te sluit, 'n gunstige toestand vir die ontwikkeling van chroniese galblaasontsteking bied.

Dit is duidelik dat verwydering van die steenlose galblaas nie ligtelik onderneem behoort te word nie en die chirurg wat worstel om tot 'n besluit te kom, sal gelei word deur die wete dat, by afwesigheid van bewysbare patologiese tekens by die galblaas, dit onwaarskynlik is dat sy pasiënt deur cholestistektomie gebaat sal word en indien dit deur 'n onbekwame chirurg uitgevoer word, kan die pasiënt onherstelbaar geskaad word. Twintig jaar gelede het Guthrie opgemerk dat die chirurg wat cholestistektomie onder hierdie omstandighede uitvoer, geen moeite sal hê om sy pasiënte op te volg nie, aangesien hulle hom vir die res van sy lewe met onverbiddelike vasberadenheid sal agtervolg!

1. Deaver, J. B. (1925): Surg. Clin. N. Amer., 5, 1516.
2. Zunk, O. C. (1926): Radiology, 6, 286.
3. Connel, F. G. (1928): Ann. Surg., 88, 837.
4. Lahey, F. H. (1927): Boston Med. Surg. J., 196, 677.
5. Young, E. L. (1928): New Engl. J. Med., 198, 729.
6. Stanton, E. MacD. (1932): Amer. J. Surg., 18 (N.R.), 246.
7. Ross, J. C. (1932): Brit. Med. J., 1, 1026.

8. Glenn, F. and Mannix, H. (1956): Ann. Surg., **144**, 670.
9. Whipple, A. C. (1926): Amer. J. Surg., **38**, 129.
10. MacKey, A. W. A. (1934): Brit. J. Surg., **22**, 274.
11. Judd, E. S. and Priestley, S. J. (1932): J. Amer. Med. Assoc., **99**, 887.
12. Cole, W. H. (1956): Ann. Surg., **144**, 674.

8. Glenn, F. en Mannix, H. (1956): Ann. Surg., **144**, 670.
9. Whipple, A. C. (1926): Amer. J. Surg., **38**, 129.
10. MacKey, A. W. A. (1934): Brit. J. Surg., **22**, 274.
11. Judd, E. S. en Priestley, S. J. (1932): J. Amer. Med. Assoc., **99**, 887.
12. Cole, W. H. (1956): Ann. Surg., **144**, 674.

DOCTOR, DON'T TELL THE PATIENT

We are often asked by relatives, where it becomes clear that malignancy or some other fatal malady is being treated, that the patient himself should not be told of the gravity of his condition. This is a very natural reaction on the part of relatives who are anxious to save the patient additional worry or fears, but the doctor must beware of acceding to this request too readily. The decision is his own responsibility. When the burden becomes heavy he may find that he has to bear it alone; he cannot share it with the relatives.

A patient is entitled to know if he is going to die, particularly if he has to put his affairs in order and sometimes, when the fact is ultimately disclosed, he will express bitter resentment at having been kept in the dark. Probably with most patients the reasons for withholding the facts are less important and less cogent than those for declaring the truth. Many patients are of such character that the doctor will have no difficulty in deciding to disclose the full truth. At the other end of the scale are the smaller number in which he will decide that it is wiser not to tell. In between, lie the cases in which the doctor may find it very difficult to decide which course to take, but he must decide for himself—he must not let the relatives decide for him. In some families the only way in which the doctor can make sure that the patient will not learn the truth is to withhold it from the

relatives as well as the patient—except perhaps one of sufficient strength of character to share with the doctor the burden of keeping the secret.

The nature of disease is such that in its terminal stages we mercifully do not want to know what is happening and lose interest in our surroundings, but intervals of awareness often occur in a long-drawn-out case and not infrequently the patient asks to be told the worst. The general fear of the lay public that the patient will collapse, or that his heart will not stand the bad news, is happily not often realized. Most patients bear up very well under bad news. They are often the only people who comfort the doctor. For, indeed, it is he who requires comforting. It is so often forgotten that while the patient bears the burden of his pathology, the doctor carries the weight of the disease. He is proud to do this, and he will do his best to alleviate both the fears and the discomforts of the sick man. But it is unfair that he should bear this burden alone. The request, 'Doctor, don't tell the patient', is often made by relatives in a selfish way; they don't want to take their share of the patient's burden and are satisfied to let the doctor carry it himself.

No one would suggest that the doctor should rush in with bad news to a patient who is not in an emotionally prepared state, but there must be a limit to medical preparation.

VALKENBERG-HOSPITAAL

II. DIE TYDPERK 1889-90

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SPESIFIEKE PROBLEME

1. Gebrek aan Differensiasie

Die administrasie van die inrigtings, veral die een op Robbeneiland, sowel as die versorging van en beheer oor die pasiënte is bemoeilik deur die aanwesigheid in een gestig van oormatig veel uiteenlopende kategorieë van manlike en vroulike, blanke en nie-blanke pasiënte—kriminele en gevaarlike sielsiekies, ander sielsiekies van alle soorte, chroniese sielsiekies, ander chroniese siekes, armlastiges, swaksinniges van alle grade, melaatses, bandiete en herstellendes van elders. Doelmatige beplanning vir so 'n heterogene versameling pasiënte, wat nie bymekaar in een gestig behoort nie, was onmoontlik, omdat hul behandeling verskillend was, en daar kon geen hoop tot ontfafeling van die probleem

bestaan nie in die aangesig van die alles oorheersende en misleidende vaste idee dat al die klasse tog in een gestig behoort.

Grahamstad, 'n jonger gestig, het nie aan 'n soortgelyke euwel mank gegaan nie. Dit het weliswaar ook beide geslagte en rasse gehad, maar die chroniese sielsiekies was reeds op Port Alfred afgesonder, die ander chroniese siekes en armlastiges was eensydig onder 'n eie leke-superintendent en aanstalles was reeds gemaak vir 'n aparte gestig vir naturelle op Fort Beaufort wat op 1 Junie 1894 geopen is, en vir 'n afsonderlike gestig vir idiote en imbesiele kinders wat op 12 April 1895 geopen is. Daar was nie bandiete of melaatses om die organisasie en doeltreffende beplanning vir die toekoms te belemmer nie, en die owerhede kon rustig met bykomende voorsiening vir toenemende getalle voortgaan. In die eerste jaarverslag oor Grahamstad meld die in-

spekteur dan ook dat uitgebreide veranderinge en nuwe geboue eersdaags onderneem sou word.¹

Die gewraakte gemis aan differensiasie was die oorsaak van moeilikheid, ergernis en hoofbrekens, veral op Robbeneiland; die hooforsaak waarom 36 jaar lank met die oorplasing van die gestig na die vasteland gesloer was, 'n reëling wat agtereenvolgens deur die gekose komitee van die wetgewende raad in 1855, die kommissie van 1861, die komitee van 1866 en die kommissie van 1879 aanbeveel, en ter voorbereiding waarvoor die plaas Tokai in 1883 vir £5,500 aangekoop was. Daar het te veel wedersyds onversoembare behoeftes bestaan waarvoor dringend voorsiening gemaak moes word.

2. Die Melaatses

Die aanwesigheid van melaatses op Robbeneiland het die vooruitgang van die gestig besonders gestrem en grotendeels tot die verwarring en onsekerheid oor die toekoms bygedra. Hulle het 'n belangrike deel van die gestig uitgemaak en toekomsplanne moes hulle ook behels. Hulle was die probleemkinders hier, sowel as by Ou Somerset, hul halfweghuis, en twee besluite omtrent hulle was nog hangende; of die siekte besmetlik was en of hierdie pasiënte op Robbeneiland moes aanbly, al dan nie.

(a) *Ongewilde Pasiënte.* Volgens die jaarverslae van die geneesheer-bestuurders, veral dié van dr. Ross in die jare 1885-88, kon 'n mens jou 'n meer ongewilde groep pasiënte nie voorstel nie; die melaatses op Robbeneiland was verwaarloos, betreurenswaardig gehuisves, en aangesien hulle vrywillige pasiënte was, kon hulle vry en onbelemmerd nie slegs op die eiland nie, maar ook na die vasteland rondbeweeg. Dit was 'n weersinwekkende, onwelriekende siekte en dit was in werklikheid onvanpas om sulke pasiënte in die kerk of by gesellige byeenkomste tussen ander pasiënte toe te laat. Tot vervelens toe het besoekers en die geneesheer-bestuurder geprotesteer, en dit was algemeen aanvaar dat hulle eendag afgesonderd sou word, maar oor die hoe en wanneer, moes daar nog besluit word.

(b) *Besmetlikheid.* Melaatsheid was 'n vry algemene siekte; na beraming was daar nagenoeg 2,000 in Kaapland in 1885,² en tot ongeveer 1880 het die mediese wetenskap nie vermoed dat dit besmetlik kon wees nie. Selfs hierna het daar nog sterk twyfel bestaan en het dit nog etlike jare geduur eer die feit algemeen deur die beroep aanvaar is, en nog langer eer die regering kon beweg word om dit te aanvaar en wetgewing deur te loods om besmette persone, merendeels gehude volwassenes, lewenslank af te sonder.

In sy verslag vir 1887 druk die koloniale mediese komitee hom nog as volg uit: 'We strongly recommend that the law as passed be promulgated without delay, especially as the opinion that leprosy is contagious is gaining ground.'³ Verder is sy betoog in 1888 veelseggend: 'Die komitee is teleurgesteld dat die wet op verpligte afsondering nog nie geproklameer is nie, want 'n meer weersinwekkende, afskuwelike, vernietigende en ongeneesbare siekte bestaan daar nie, en op grond van die jongste bewyse oor die besmetlikheid daarvan... hoop hulle dat die regering sonder versuim die wet sal proklameer, die enigste middel om hierdie gevreesde

plaaag te bestry.'⁴ Die volgende jaar moes die komitee hierdie betoog nogmaals herhaal,⁵ en daar is nog etlike jare met die toepassing van die wet gesloer.

Die toekoms was dus onvoorspelbaar en daar kon vanselfsprekend te midde van sulke onsekerheid en onbestendigheid kwalik toekomsplanne beraam word, maar in dié jare het die standpunt dat melaatses in 'n afsonderlike gestig behoort, sterk posgevat. In 1885 het die geneesheer-bestuurder van Robbeneiland in alle erns aanbeveel dat hulle na die vasteland, en dit nogal na Valkenberg, oorgeplaas moes word, ten einde hulle naby die polisie op Mowbray te hou, wat met die dissipline kon help.⁶ In 1889 moes daar nog eers 'n gekose komitee oor die verspreiding van melaatsheid besluit. Hul bevinding was dat dit wel besmetlik was, en dat die melaatses op Robbeneiland moes aanbly. So 'n besluite uitspraak het 'n heilsame uitwerking gehad, en daar kon toe dadelik op groot skaal vir hulle gebou, en voorbereidings getref word om baie meer van hulle uit die res van Kaapland en die Vrystaat op te neem. Die verhuising van die sielsiekes en chroniese siekes na die vasteland, die ontstaan van die hospitaal op Valkenberg, sowel as die uitbreiding van Ou Somerset as 'n hospitaal vir chroniese siekes, was dus grotendeels, ofskoon nie uitsluitlik nie, aan die aanwesigheid van die melaatses op Robbeneiland en hulle ongewildheid aldaar te danke.

3. Gebrek aan Passende Geboue

Terwyl Grahamstad in 1889 reeds met planne vir grootskaalse ombou en uitbreiding besig was, kon aan Ou Somerset en Robbeneiland by wyse van addisionele voorsiening vir sielsiekes niks gedoen word nie, omdat die owerheid opgeskeep gesit het met ongelooflik ongeskikte geboue, grotendeels reeds bouvallig, sodat aanbou of herstelwerk in baie gevalle 'n onbegonne saak was. Dit blyk uit veelvuldige verwysinge in die geneesheer-bestuurders se jaarverslae.

Vir 1890 rapporteer dr. Dodds: 'Wanneer die voor-genome uitbreiding aan die gestig op Grahamstad voltooi is, hoef dit selfs vir goeie modelle nie terug te staan nie. Met die Westelike Provinsie is dit anders gesteld.'⁷ Maar aangaande Ou Somerset en Robbeneiland berig hy: 'Soos hulle daar staan, is hierdie inrigtings ten regte afgekeur as gestigte vir sielsiekes.'⁸

In die aangesig van alles oorheersende onsekerheid oor die toekoms van die hele Robbeneiland-gestig en van verwarrende meningsverskille, in so 'n tydperk van gisting en rigtingsoek, kon daar nie op groot skaal gebou word nie, omdat niemand kon voorspel watter een of meer van die hoofkategorieë van pasiënte na die vasteland oorgeplaas sou word nie, en of almal nie dalk sou verskuif word nie, iets wat inderdaad jare later gebeur het.

Die nypende ekonomiese depressie, stelling die ergste in sy geskiedenis, wat die land in die jare 1883-87 geteister het, was 'n ander, ofskoon ondergeskikte oorsaak, waarom nie in hierdie tyd aangebou is nie. Op alle gebiede moes besuinig word, en die hospitale moes dit veral ontgeld, sóseer dat in 1884 'n verminderde diëtskaal ingestel is. Dit het die uiterste ellende en armoede ten gevolge gehad, en was één rede waarom nie

sonder verwyl oorgegaan is tot die oprigting van 'n nuwe gestig toe Tokai in 1883 vir dié doel aangekoop was nie.

Die geboue op Robbeneiland was dan ook uiters primitief, ongeskik vir 'n hospitaal, en vir etlike jare is niks daaromtrent gedoen nie. Daar was bv. 'n kudde melkkoeie op die eiland en ons vind dat die koloniale mediese komitee in alle erns aanbeveel het: 'The yard now occupied by the bull might be roofed, and would make a good extra ward.'⁹ En voorts: 'In die opwas-kamer in afdeling 1 moet die hoek van die dak, wat nou oop is, bedek word om die ontsnapping van pasiënte te voorkom... die vloere van die twee slaapsale in afdeling 3 is verslyt en moet sonder verwyl hernu word.' In 1884¹⁰ rapporteer die komitee as volg: 'Die ou houtgeboue vir die manlike pasiënte is in 'n uifers bouwvallige toestand, en dit krioel van luise,' en in 1885 verwys hulle na 'n uitgestrekte en verrottende gestig.' Hulle dring aan op nuwe geboue, 'n algehele omskepping en reorganisasie, en hulle sien uit na die verhuising na Tokai.

In 1884 het die geneesheer-bestuurder, dr. Ross, al die voorgaande onderskryf en aansoek gedoen om afgedante spoorwaens of houtgeboue in die plek van die rietdakskuur wat pasiënte moes huisves. Hy maak melding van 'aaklige krotte', 'vervalle houtgeboue' en 'miserabele geboue wat die personeel bewoon.' 'Huddled up in poky little dens—dark, narrow and insufferably close at all hours; and it is a great pity that their social feelings should be blunted by squalid surroundings'—aldus die huisvesting vir die personeel.¹¹ Dit hoef ons nie te verbaas nie, aangesien die oorspronklike aanleg 'n gevangenis was; maar onder sulke omstandighede is dit moeilik om aan te bou en uit te brei. Dr. Dodds rapporteer dan ook: 'In die huidige stadium van oorgang sou dit geldverkwisting beteken om verreikende veranderinge aan te bring.'¹²

4. Ongerieflike Geografiese Ligging

Ofskoon dit welverdiende beroemdheid vir sy gesonde klimaat verwerf het, en sommige geneesheer dit die eerste plek in die wêreld hiervoor toegeken het, was die geografiese ligging van Robbeneiland altyd uiters ongeskik vir 'n gestig, omdat die vervoer van pasiënte, besoekers, personeel en voorrade tussen die vasteland en die deur wind-geteisterde eiland so jammerlik ongerieflik en ontoereikend was. So 'n gestig het bv. 'n groot hoeveelheid en verskeidenheid van voorrade nodig, landingsgeriewe was primitief, die boot het slegs tweekeer per week gevaar, vanaf 1889 driekeer, amptenare moes kort besoeke aan die vasteland aflê om so spoedig doenlik terug te keer, die boot het na besigheidsure in Kaapstad aangekom en dan moes daar 2 nagte in 'n hotel deurgebring word, ens. Dit verg verbeeldingskrag om ons in die bedroefde omstandighede in te dink.

Sedert die ontstaan van die gestig het hierdie tergende ongerief hom terdeë laat geld, en tot vervelens toe is verhoë tot die owerhede gerig om beter vervoer, beter landingsgeriewe, en om die hele gestig na die vasteland oor te plaas. Só kon dit nie voortduur nie, en hierdie ongerief het deeglik bygedra tot die onsekerheid oor die toekoms en die gevolglike vertraging met uitbreiding.

ALGEMENE TOESTANDE OM EN BY 1890

Dodds se halfjaarlikse verslae was gebalanseerd, objektief, en het volledige besonderhede oor die gestigte verstrek, wat vandag waardevol is omdat hulle uitmuntend insiggewend vir die toestande van dié tyd is.

Ons vind dat toelating tot 'n sielsiekegestig nie 'n lewenslange aanhouding meegebring het nie. Pasiënte is ook ontslaan; baie van hulle as herstel, ofskoon nie in gelyke mate met Britse gestigte nie, waar die verhouding van hersteldes tot toelatings nagenoeg 40%, vergeleke met 35% in Kaapland was.¹² Tegnies kriminele sielsiekes kon nie sonder veel omslag vrygelaat word nie, anders sou daar meer hersteldes ontslaan geword het.

Daar was nie 'n oormaat van ongelukke en ontsnappings nie. Die sterftesyfer was redelik; in 1889-90 was dit in Ou Somerset 6.8% van die gemiddelde getal inwonendes, 8.6% op Robbeneiland, en 6.1% vir Grahamstad. Die inspekteur se verslae oor die algemene gesondheid van die pasiënte was gunstig.

Dodds se verwysings na die gehalte van die voedsel, sowel as die voorbereiding daarvan, was altyd gunstig in vergelyking met wat hy in Brittanje ondervind het. Die daaglikse onderhoudskoste was 2/6, behalwe in Ou Somerset waar, danksy die primitiewe toestande, dit 1/4 was. Vanaf vroeë jare was dit altyd die laagste, selfs laer as in die oorheersend nie-blanke algemene hospitaal op Kingwilliamstown, wat tweede plek ingeneem het.

Wat netheid betref, het die voorkoms van die vertrekke soms veel te wense oorgelaat, ofskoon die vroulike afdelings oor die algemeen netjies was. Dodds moes dan ook dikwels ongunstig rapporteer. In 1889 tydens die eerste inspeksie was daar baie tekortkominge in die mansafdelings op Grahamstad.¹³ Onwelriekende emmers moes as kamerpotte dien, daar was geen gemakke in die blanke manlike afdelings nie, die 37 mans wat daar geslaap het, moes deur die nie-blankes se slaapsaal loop en hulle gemakke gebruik, en Dodds het wasbakke aanbeveel totdat 'n geskikte gemak kon aangebring word. Die primitiefste meubels is in die mansafdeling aangetref, en daar was min of geen strewe om die kamers aantreklik te maak nie. Een van die blankes se voorkamers was o.a. gebruik om klapperhaar uit te pluus. Die besoekkamer was kaal en sonder meubels. In die vroueafdelings was daar gebrek aan enkelkamers; 26 het in 18 enkelselle geslaap, iets wat onwenslik was vir opgewonde pasiënte. Die latrines in die mansafdelings, en in die binneplaas vir nie-blanke vroue, was in 'n skandalige toestand; hulle het onmiddellike aandag geverg. In die manlike afdelings het die blankes en natuurle dieselfde binneplaas en gemakke gebruik. Dodds het aanbeveel dat die binneplaas in twee afgeskort en aparte gemakke aangebring word.

Op Robbeneiland was die rasse ook nie geskei nie; hulle het deurmekaar geslaap, geëet en geleef. Dodds het hier ook geen besware teen die voedsel geopper nie; wat hy gesien het, was voldoende en goed voorberei. Hy moes hom egter ongunstig uitlaat oor die wyse waarop dit bedien is. In mansafdeling 2 moes die pasiënte 'n maal, bestaande uit sop, gekookte vleis en rys, met hul vingers eet. Meer moeite kon met die bediening van etes gedoen word en die pasiënte kon aangemoedig word

om minder soos diere te eet. 'n Nypende ongerief in een afdeling was dat dit sonder eetsaal was. Die mans moes buite onder 'n lang smal sinkdak, aan lang tafels eet. As dit gereent het, moes hulle op beddens in 'n klein, tot oorloepens toe vol, slaapsaal sit en eet. Dit het ook geen gemakke of badskamer gehad nie. Die mans van 2 afdelings moes deur die jaar buite in die opelug in balies bad.

Uit 'n moontlike 217, was 164 pasiënte op 'n individuele diët; dit was onnodig baie, en 'n hersiening is aan die hand gedoen. Sommige van die mans het lang, loshangende kamerjasse gedra, wat lelik en onnodig was. Die kleredrag van die vroue kon ook verbeter, en groter verskeidenheid kon aangebring word. Baie van die pasiënte het op matrasse op sementvloere geslaap, nie slegs op Robbeneiland nie, maar ook op Grahamstad en in Ou Somerset, en Dodds het op onmiddellike herstel van hierdie wantoestand aangedring. Die plankvloere van sommige slaaplouke was vuil en het sleg geruik. Verskeie van die enkelselle het so te sê geen ventilasie gehad nie. Die pasiënte se klere, lakens, komberse en matrasse was vuil. Die washuis was uiters onbevredigend, en beter voorsiening het gebiedend noodsaaklik geword.

In geenene van die gestigte was daar toereikende voorsorg teen brand nie, en daar was nie genoeg, in sommige instansies geen, personeel snags op diens nie. Dit was 'n veelvoorkomende reëling dat die staf in dieselfde kamers as die pasiënte, soms agter 'n seilafskorting, moes slaap. Volgens Dodds was daar genoeg verpleegkragte, gewoonlik 8-10 pasiënte tot 1 staf. Dit het moeilik gegaan om eersterangse personeel te werf. Hul dienstertyn was kortstondig, en hulle moes dikwels ontslaan word. In 1890 het 16 Ou Somerset verlaat, van wie 6 ontslaan was;¹⁴ op Robbeneiland het uit 'n moontlike 18, 6 bedank en 6 is ontslaan.¹⁵ Drank en onbetroubaarheid was die algemene oortredings; slegte, primitiewe huisvesting, gebrek aan alledaagse geriewe en lae besoldiging was die grondliggende faktore.

Daar was dus verbasend baie gebreke, tekortkominge en wantoestande wat hervorming geverg het. Dodds het oor die nodige persoonlike eienskappe, die ondervinding, bekwaamheid en dryfkrag beskik om te lei, en sy geneesheer-bestuurders was gewillig om hom as leier te erken. Maar dit het tyd vereis. Die grootste gebreke was ten opsigte van eetsale, voorkamers, verandas, gemakke, badkamers, washuise, plankvloere, vensters, beddens en ander meubels, beter klere, beter verpleegkragte; d.w.s. 'n nuwe begin moes gemaak word, en in die Westelike Provinsie moes van die fondament af herbou word. Die oue moes geskrap word, en uit die puinhoop moes 'n nuwe verrys, immuun teen die ou kwale; daarom Valkenberg.

VERDIENSTES VAN DR. DODDS

1. Inspekteur van Gestigte

W. J. Dodds, M.D., D.Sc., eerste bekleër van dié betrekking, was 'n bekwame man, wat sy deskundige kennis en oorsese ondervinding die gestigte van Kaapland ryklik ten goede laat kom het. As hooffiguur in die verreikende ontwikkelinge, omwentelinge en reorganisasie na 1888, het hy, deur chaos in orde om te skep en

rigting aan te dui, veel tot stand gebring. Die sielsiekehospitale is kwartaalliks deur die amptelike besoekers deurgegaan wat hul verslae aan die regering voorgelê het. Aanvanklik was die inspekteur van sielsiekehospitale gelyktydig geneesheer-bestuurder van Valkenberg, maar weldra het hy nie meer administratiewe verantwoordelikhede gedra nie. Hy het elke gestig gereeld besoek en verslag gedoen; verder het hy voldoende geleentheid gehad om die regering met advies te bedien waar deskundige kennis en die behoeftes van die hospitale dit vereis het. Die koloniale sekretaris het al die gestigte beheer, en die geneesheer-bestuurders was direk aan hom verantwoordelik.¹⁶

Die inspeksies deur so 'n bekwame medikus, gepaard met die ferm, dog takvolle manier wat uit sy verslae blyk, het heilsaam op die administrasie van die gestigte en die behandeling van pasiënte gewerk. Daar is geen direkte of indirekte aanduidings, en dit skemer allermins deur die verslae van die inspekteur, dat die geneesheer-bestuurders aanstoot geneem het tot die inspeksies nie. Trouens, hy kon altyd van vordering berig en ons kom bv. die volgende mooi taal in 'n jaarverslag van 'n onderhorige geneesheer-bestuurder teen: „Een besoek is afgelê deur die onlangs aangestelde inspekteur van gestigte, wat hom gunstig geuit het, ondanks baie tekortkominge. Baie van die inspekteur se aanbevelinge is uitgevoer, en ek hoop dat, indien u my geldelik ondersteun, 'n merkbare verbetering by sy volgende besoek gevind sal word.“¹⁷

2. Getalle

Daar kan kortliks gelet word op die getal sielsiekes waarvan Dodds kennis gedra het. Teen die einde van 1890 was daar 595 sielsiekes in Kaapland se gestigte; 335 in Ou Somerset en op Robbeneiland, en 260 in die gestig op Grahamstad, sy anekse inkluis. Die 595 gevalle het bestaan uit 310 blank en 285 nie-blank; 355 was mans en 240 vroue. In hierdie getalsverhouding van mans tot vroue tref ons 'n ooreenkoms tussen ons gestigte en die van Nieu-Suid-Wallis, Victoria en Nieu-Seeland, maar 'n kontras met dié van Engeland en Skotland, waar die verhouding omgekeerd was.

Omdat 'n aansienlike persentasie van die toelatings kriminele sielsiekes was, moes die gevangenis as onderhorige sielsiekegestigte dien. In 1890 is 117 gevalle bv. deur die tronke opgeneem, waarvan 55 langer as 2 maande daar moes vertoef,¹⁸ deels te wyte aan vertraginge in die verkryging van bevels wat oorplasing tot 'n gestig magtig, maar merendeels aan ontoereikende hospitaalvoorsiening.

Volgens die direkteur van sensus sou daar om en by hierdie tyd nagenoeg 497 sielsiekes en 784 geestesgebrekiges, 'n totaal van 1,281 in private woonhuise in Kaapland gewees het, van wie die staat geen offisiële kennis gedra het nie.¹⁹

3. Wysigings in die Wet op Geestesgebreke

Dodds was by uitnemendheid 'n doeltreffendheids-ekspert. Toegerus met rype, veelsydige ondervinding van oorsese gestigte, kon hy 'n menigte verbeterings invoer ten opsigte van die voorkoms van die hospitale, die behandeling van pasiënte, en veral die prosedure van toelating en ontslag, ten einde vertraginge te beperk,

en beter beheer en toesig oor pasiënte te verkry. Hy het hom veral beywer om wysigings in die wet op geestesgebreke, iets wat hoë vereistes gestel het aan iemand wat alreeds 'n oorvolle program moes behartig. Binne 'n jaar het hy verreikende veranderinge in die regulasies bereik, en baie van die reëls en prosedure wat hy destyds ingestel het, is vandag nog van krag, ofskoon hier en daar effens gewysig. Met reg uit hy hom dan ook as volg in sy tweede jaarverslag: „Altogether we are much more organized in the lunacy department than we were a year ago.”²⁰

(a) *Die Wet van 1879.* Toelatings was tweesoortig: Onder die bestaande wet van 1879, moes 'n sielsieke eers 'n misdadig pleeg, of die voorneme toon om een te pleeg, om dan by die hof aangekla te word, alvorens die wet op hom van toepassing was, en vir hom voorsiening kon maak. In 1889 was 23 van die 122 toelatings kragtens hierdie wet, terwyl buite verhouding baie van die werklike gevalle in die gestigte onder hierdie wet gesorteer het; 94 uit 'n moontlike 572. Dodds wys daarop dat baie van hierdie pasiënte geringe, slegs tegniese misdade gepleeg het, wat in werklikheid niks anders as simptome van hul siekte was nie. Daarna het hulle onder werklik kriminele en gevaarlike krank-sinniges resorteer, iets wat hul klassifikasie en behandeling in die gestigte, asmede hul kanse tot ontslag belemmer het; soms moes sulke sielsiekes wekelank in 'n tronk aangehou word, omdat die magtiging tot hul oorpasing na 'n gestig lank vertraag is.

Terwyl die verhouding van kriminele sielsiekes in Engeland 1% en in Skotland $\frac{1}{2}$ % was, was dit in Kaapland 16%.²¹ Dodds het hom beywer om hierdie wan-toestand uit te wis. Hy het na 'n duidelike skeiding tussen die gewone sielsieke en die gevaarlike kriminele gestreef, nie alleen in die prosedure van hul opname en ontslag nie, maar ook in hul behandeling en akkommodasie in die gestig.

(b) *Sirkulêre No. 28 van 1866.* Om die onaangename publisiteit te voorkom wat by die voorgaande betrokke was, het familiebe-rekkinge dan aansoek gedoen by die regering om so 'n sielsieke tot 'n gestig toe te laat, net soos in die algemene hospitale. Hiervoor het die koloniale sekretaris se sirkulêre no. 28 van 1866 voorsiening gemaak, maar daar het geen landswet bestaan, wat die aanhouding van sulke persone gemagtig het nie, 'n toedrag van sake wat, ondanks die veelvuldige veiligheidsbepalings, nie in die publieke belang was nie, en wat die mediese beroep, sowel as die geneesheer-bestuurders, in 'n ongemaklike posisie geplaas het. 'n Verdere nadeel was dat sulke gevalle lank moes wag om opgeneem te word, omdat die twee vereiste mediese sertifikate na so baie owerheidspeuse verwys moes word. Dodds het na wetlike voorsiening vir die aanhouding van sulke gevalle gestreef; binne 'n jaar het hy dan ook 'n verandering bewerkstellig, sodat 'n sielsieke, met 2 geneeskundige sertifikate en 'n bevel van 'n magistraat, onmiddellik opgeneem kon word.

(c) *Privaatgestigte.* Verder het Dodds die vraag van private sielsiekegestigte of tehuise vir betalende pasiënte aandaag geskenk. Tot dusver het die regering geen seggenskap oor sulke huise gehad nie, en Dodds wou 'n mate van toesig en beheer invoer.

(d) *Ontslag van Pasiënte.* Dit het ook nodig geword

om die wet so te wysig dat sielsiekes makliker en gouer ontslaan kon word as hul toestand dit regverdig het. Dit was veral omslagtig om kriminele sielsiekes te ontslaan, en Dodds het hom daarvoor beywer om nie-kriminele pasiënte deur die geneesheer-bestuurder te laat ontslaan.

4. Geboue

Dodds het, deur aan te dring op rasse-skeiding en die indeling van pasiënte in akute nuwe gevalle, chroniese gevalle, en kriminele gevalle; en deur verder die melaatses in hul eie gestig, en die armlastiges en chroniese siekes weer in hul eie inrigting af te sonder, 'n einde gemaak aan die wantoestand van verwardheid en rigting-loosheid waaraan die hospitale en gestigte van die Westelike Provinsie so lank mank gegaan het, sodat die toekoms 'n redelik duidelike patroon aangeneem het. Hierdie differensiasie was die hegte fondament waarop gebou kon word.

Daar kon toe onmiddellik by Ou Somerset met bykomende huisvesting vir chroniese siekes begin word, en op Robbeneiland kon groot, nuwe geboue vir melaatses opgerig word, veral vir die verwagte groot toename in hul getalle wat sou volg op die toepassing van die wet op verpligte afsondering van melaatses.

Wat voorsiening vir sielsiekes betref, was hierdie 'n tydperk van oorgang. Op Valkenberg moes 'n groot hospitaal verrys; dit moes voorrang geniet, maar die aanvoorkomende tyd in beslag geneem. Dodds het voorlopig vir Robbeneiland 'n onderhorige, kleiner gestig, soortgelyk aan die een op Port Alfred, in die vooruitsig gestel. Inmiddels kon op Grahamstad en Port Alfred bykomende akkommodasie aangebou word. Van Ou Somerset is definitief as 'n gestig vir sielsiekes afgesien.

Omdat Dodds steeds onvermoeid te velde getrek het teen die tronkagtige voorkoms van, en ander boukundige gebreke aan die gestigte, is daar druk omgebou ten einde hulle geriefliker en meer soos hospitale in te rig, in so verre dit met sulke primitiewe geboue moontlik was. Veral badskamers, eetkamers, sitkamers, store, ens. is aangebring.

Die keuse tussen Tokai en Valkenberg as geskikte terrein vir 'n toekomstige hospitaal het by Dodds berus, wie se keuse op Valkenberg geval het, hoofsaaklik omdat dit makliker bereikbaar was.

Die Porter-Verbetergestig moes derhalwe in 'n tydelike hospitaal omskep word. Teen die einde van Junie 1890, nadat die 57 seuns na Tokai uitgetrek het, kon die geboue, grotendeels die oorspronklike buitegeboue van die opstal opgeknop word, iets wat moeilik was omdat hulle oud, byna bouvallig en ongerieflik gerangskik was.

Dr. Dodds se groot verdienste is dus nie so seer om die paleisagtige geboue wat oornag verrys het nie, maar veel eerder om die bekwame en geslaagde manier waarop hy die noodsaaklikheid van uitbreiding, sowel as die rigting wat ingeslaan moes word, by die regering aanhangig gemaak het.

Die nood was werklik dringend. In Brittanje was die verhouding van geregistreerde sielsiekes tot die bevolking nagenoeg 1 : 345, in Ierland 1 : 316, Suid-Australië 1 : 431, Nieu-Seeland 1 : 380, terwyl dit vir die blanke bevolking in Kaapland 1 : 1,180 was.²² Hierdie syfers

openbaar die enorme agterstand wat ingehaal moes word, en bevestig die tragiese, daaglikse ondervindinge met gevalle van kranksinniges in die samelewing.

Dodds het Ou Somerset en Robbeneiland sonder meer afgekeur met uitinge soos: „Nie in akkoord met moderne opvattinge nie, en dit strek ons nie tot eer nie . . . die Ou Somerset sielsieke-afdelings is 'n klad op die hospitaaladministrasie van die staat, en moet geheel en al ontruim word en omskep word in addisionele huisvesting vir chroniese siekes.”⁷ Die afdelings vir die nagenoeg 110 sielsiekes van Ou Somerset het bestaan uit 47 enkelselle wat in 4 rye gestaan het, na die werf geopen het, en 27-36 vk. vt. vloeroppervlak per pasiënt gebied het. Daar was geen voorkamers nie, en bad- en toiletgeriewe was primitief en het by die nie-blankes ontbreek. In slegte weer moes die pasiënte in hul kamertjies bly, en wanneer melaatsdes deurgereis het, moes één vertrekke ontruim word om hulle op te neem.

Sulks was die toestande waarteen Dodds moes veg. Hy het volhardend gepleit vir die oprigting van 'n nuwe hospitaal vir 250 pasiënte op Valkenberg, en die behoud van Robbeneiland as 'n onderhorige gestig. „Dit word gehoop dat ons eindelijk die oprigting van 'n hospitaal op die vasteland nader. Byna 40 jaar lank is dit aanbeveel, en is die noodsaaklikheid daarvan ingesien. Daar is stellig min edeler of dringender doelwitte vir naasteliefde, dan om waardige voorsiening te maak vir diegene wat aan die treurigste van siektes ly,” aldus dr. Dodds.⁷

5. Verdere Algemene Verdienstes

Die inspekteur het onvermoeid daarop aangedring dat die pasiënte met werk besig gehou word; en almal wat kon werk, is ingespan om klere te herstel, water aan te ry, afdelingswerk te doen, in die kantore, die werksinkels, die wassery, die kombuis, ens. Die geneesheer-bestuurders het hieraan so ver doenlik gehoor gegee, met verblydende resultate. Diegene wat onwillig of onbekwaam was om te werk, moes daaglik vir 'n wandeling buitekant die binneplaas geneem word.

Hierdie binneplase het altyd 'n belangrike rol by die beheer oor pasiënte gespeel. Weens gebrek aan sitkamers, was dit tradisioneel dat die meeste hul dae in hierdie binneplase of „airing courts” verslyt het; iets waaraan Dodds 'n hekel gehad het, omdat hulle daar verstandelik agteruitgegaan en emosioneel ontaard het. Hy het baie gedoen om pasiënte in beweging te kry, of met nuttige werk besig te hou, wat dan ook hul herstel bevorder het. Onder die nuwe bedeling het die binneplase hul aansien grotendeels ingeboet, en was hulle dikwels leeg. Dit het geen verlies in die beheer oor die pasiënte as gevolg gehad nie. Die inspekteur het die personeel aangemoedig om die binneplase 'n aantrekliker, aangenamer en minder tronkagtige voorkoms te verleen. Struik, bome en blomtuine is aangeplant, die lelke tronkmure en hoë plankafskortings is verwyder om plek te maak vir netjiese heinings en mure.

Ontspanning het meer aandag geniet. Halfmaandelikse danse, konserte, krieket, voetbal en uitstappies is gereël. In Ou Somerset kon die pasiënte by gebrek aan geriewe, nóg met werk nóg met wandelinge of vermaaklikhede besig gehou word. Daar was bv. geen voorkamer en geen kunsmatige beligting nie; om 4-uur het die

pasiënte hul aandete genuttig om dan voor sonsondergang bed-toe te gaan. Op aanbeveling van die inspekteur het hierdie pasiënte daaglik vir 2 uur liggaamsoefeninge, vermoedelik in die binneplaas, gedoen. Toe Valkenberg geopen is, was Dodds die eerste superintendent en het hy hom op voorbeeldige wyse vir die vermaak van sy pasiënte beywer, deur voorsiening te maak vir danse, amateur- en beroepskonserte, towerlantern- en goëlvertonings, voetbal, krieket, tennis, teepartytjies, pieknieke, rytoertjies en besoeke aan die stad.

Baie meer is vir die persoonlike gerief van pasiënte gedoen en groter verskeidenheid is in hul dieet ingevoer. Insteede van tussen 5-6 nm. bed-toe te gaan, soos gebruikelik was, is baie van die pasiënte die geleentheid gegun om hulle na die dag se werk met speletjies of op ander wyse te vermaak. Die afdelings, hul tuiste, is aantrekliker en vroliker gemaak deur hulle te skilder, met blomme en prente te verfraai, en vensters in te bou waar dit so dikwels ontbreek het.

Al hierdie veranderinge het as gevolg gehad dat minder pasiënte opgesluit, of onder meganiese dwang geplaas moes word. Ofskoon pasiënte af en toe opgesluit of meganies beheer is, kon dit slegs met goedkeuring van die geneesheer geskied. Dodds het registers ingevoer waarin sulke gevalle aangeteken moes word. Ander boeke en registers is ook ingestel, soos getalle-registers, gewigs-registers, daaglikse bywoningsregisters, gevalleboeke vir kliniese verslae oor pasiënte, ens. Baie van hierdie registers, vorms en boeke word vandag nog in gewysigde vorm gebruik.

Die inspekteur het op strenger toepassing van die regulasies en die wet op geestesgebreke gelet, en 'n einde aan onreëlmatighede, veral by die toelating, ontslag, oorplasing en verlof van pasiënte gemaak.

Daar is nog baie ander verbeteringe ingevoer. Dodds het spesiale aandag aan die netheid van pasiënte en hul kleredrag geskenk, die bediening van etes en gedrag aan tafel. Hy het opdrag gegee dat voldoende nagstaf op diens geplaas word, om nat en vuil pasiënte wakker te maak en te versorg, iets wat voorheen nie gedoen was nie. By sy inspeksies het hy dan ook verslag gedoen oor die getal pasiënte wat die vorige nag nat of vuil was. Hy het steeds aangedring op rasse-skeiding, met welslae, want binne enkele jare is hiermee ver gevorder.

Ten slotte het Dodds belowe: „In die toekoms sal sonder twyfel meer aandag aan die mediese en wetenskaplike aspekte van sielsiekte bestee word as wat prakties moontlik was in 'n jaar van reorganisasie; en die leuse van ons gestigte sal wees, „To cure the curable and to brighten the lives of those that cannot be cured”.”²³

VERWYSINGE

Die verwysing is na die Cape of Good Hope bloubouke: Reports of the Medical Committee, Inspector of Asylums, and on the Hospitals and Asylums.

1. Inspector of Asylums: 1889, p. 16; en 1890, p. 21.
2. Geneesheer-bestuurder: Robbeneiland; 1885, p. 9.
3. Medical Committee: 1887, p. 3.
4. *Idem*: 1888, p. 3.
5. *Idem*: 1889, p. 3.
6. Geneesheer-bestuurder: Robbeneiland; 1885, p. 22.
7. Inspector of Asylums: 1890, p. 15.
8. *Idem*: 1889, p. 13.
9. Medical Committee: 1883, p. 6.

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10. *Idem*: 1884, p. 15.
11. Geneesheer-bestuurder: Robbeneiland, 1884, p. 13.
12. *Idem*: 1889, p. 9.
13. *Idem*: 1889, p. 15.
14. *Idem*: 1890, p. 18.
15. *Idem*: 1890, p. 17.
16. *Idem*: 1898, p. 137.

17. Geneesheer-bestuurder: Grahamstad, 1889 p. 27.
18. Inspector of Asylums: 1890, p. 10.
19. *Idem*: 1891, p. 103.
20. *Idem*: 1890, p. 13.
21. *Idem*: 1889, p. 8.
22. *Idem*: 1891, p. 105.
23. *Idem*: 1890, p. 9.

MENINGITIS DUE TO PNEUMOCOCCAL OR HAEMOPHILUS ORGANISMS

A CLINICO-PATHOLOGICAL STUDY

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The high immediate mortality and the severe sequelae attendant on these two types of infecting organisms before the advent of specific therapy needs no emphasis. Even with modern treatment by chemotherapy and antibiotics the mortality and morbidity rates remain disappointingly high. This investigation was undertaken to study the clinical and pathological aspects of these two specific kinds of meningitis, and to suggest possible improvements in diagnosis, treatment and prognosis.

CLINICAL MATERIAL

All European and Coloured cases of these specific meningitides admitted to the Addington (European) Hospital in Durban during the previous 7 years have been included in the survey. Natives and other non-Europeans however have been excluded. It is considered that very few European cases are not dealt with by this hospital, so that the hospital records reflect fairly accurately the incidence of these two diseases in the neighbourhood. In fact, only 2 additional cases could be traced, which had been seen in another European hospital during the relevant time interval; both have been included in this series.

A full clinical and bacteriological examination was done in all cases. In 5 cases, each of pneumococcal and of haemophilus infection, the infecting organisms could not be isolated in pure culture. Direct films of the CSF deposits in these cases were positive for the organisms but the final bacteriological diagnosis was made only on morphological features. All organisms isolated were confirmed by routine bacteriological methods but were not typed. Tests for sensitivity to antibiotics were done, by means of the disc plate method. Originally serial assays of sulphonamide and antibiotic concentrations in the CSF were also done but, since adequate inhibitory levels were produced following therapy, these assays were discontinued.

In some cases only was permission granted to perform an autopsy on patients who had died from these diseases.

Treatment was on the lines recommended by Patterson (1956) and by Robbins and Eiber (1954). All cases that recovered were followed up and reviewed about 3 months after discharge from hospital to check for possible delayed complications of the meningitis.

RESULTS AND DISCUSSIONS

During the 7-year period there were 28 cases of meningitis due to pneumococci and 17 cases due to *Haemophilus*

influenzae. Robbins and Eiber suggest that haemophilus meningitis is more frequent than the pneumococcal variety

TABLE I. DISTRIBUTION OF CASES OF MENINGITIS

Geographical Distribution	Time Interval (Years)	Pneumococcal Cases	Haemophilus Cases
Holland	4½	24	31
(Desmit, 1955)			
Durban, South Africa	7	28	17
(present series)			
California, USA	23	98	128
(Koch and Carson, 1955)			
Philadelphia, USA	10	102	—
(Alexander <i>et al.</i> , 1953)			
Kentucky, USA	4	—	44
(Bloor <i>et al.</i> , 1950)			
Sydney, Australia	2	—	47
(Margolis, 1955)			
Melbourne, Australia	7	—	196
(Schivone and Rubbo, 1953)			

in North America. This distribution is seen in the series quoted by Koch and Carson (1955) from California, and by Desmit (1955) from Holland, but the reverse distribution applies to the present series from Durban, South Africa

TABLE II. SITE OF INITIAL DISEASE

	Respiratory Tract	Ears	Others	Undetermined	Total
Pneumococcal Cases	12	6	2	8	28
Haemophilus Cases	10	3	0	4	17

(see Table I). In none of the series quoted are these specific types of meningitis common, but they occur often enough to be considered in the differential diagnosis of purulent meningitis. The clinical course of these two types of meningitis varied markedly, and several points in this connection

TABLE III. RESULTS OF THERAPY

	Pneumococcal Cases Complications	Deaths	Haemophilus Cases Complications	Deaths
Present series	5/28	10/28	8/17	0/17
Desmit's series	8/24	1/24	2/31	1/31
Bloor's series	—	—	11/29	10/44
Alexander's series	?	81/102	—	—

are worthy of more detailed study. The incidence and site of initial infection are shown in Table II. The results of therapy were disappointing (Table III).

Our pneumococcal cases still show a high mortality rate of 36%, which compares only relatively favourably with the mortality figures quoted by Alexander *et al.* in 1953 of (25-70%) in those series which had been reported in the medical literature up to that time. However, Patterson considers that a rate of approximately 40% is to be expected in pneumococcal cases, varying somewhat according to age. All the deaths in this series occurred within 2 days of the onset of symptoms of cerebral involvement. On the other hand, the haemophilus cases, in spite of the satisfactorily low mortality rate, must also be considered disappointing; the number of complications is high and residual damage remains severe and permanent. In the series of haemophilus infections presented by Bloor *et al.* (1950) there was a 42% mortality in cases up to 9 months of age, with an over-all mortality of nearly 23% for all age-groups. Meade and Weinstein (1956) report a series of 40 cases, all of whom recovered without complications. No deaths are recorded in this small haemophilus series from Durban, although the numbers showing complications was 47% of the total number of cases.

Alexander *et al.* (1953) noted in their series that a meningitis secondary to (pneumococcal) pneumonia carried a worse prognosis and that the best prognosis was in the age group 1-15 years. In the present series no difference in prognosis referable to the site of origin of the disease was

TABLE IV. AGE DISTRIBUTION OF CASES OF MENINGITIS

Age	Pneumococcal Cases		Haemophilus Cases
	Recovered	Died	Recovered
Birth-1 year	..	—	—
0-9 months	..	4	2
Over 9 months	..	0	1
1-15 years	..	7	11
16-50 years	..	7	3
Over 50 years	..	0	3
Total	..	18	10

noted, although the numbers of cases was possibly too few to reflect a true picture. In addition, there was no significant difference noted between age-groups, although the mortality in pneumococcal cases seemed higher at both extremes of life (Table IV). From Table IV it is easily seen that both diseases are by no means limited to the first few years of life.

The examination of the CSF was used as an essential aid to diagnosis and an attempt was made to correlate the pathological findings with the prognosis in these cases. It was noted that in all cases of haemophilus infection the organism was found in the stained film made from the CSF deposit, and the same applied to the cases of pneumococcal meningitis with two exceptions, both cases in which antibiotics had been given beforehand. Of these two cases the organisms were only discovered on culture in one and were not isolated at all in the other.

Neither the degree of cellular response, nor the sugar content nor chloride analyses of the CSF could be related to the ultimate prognosis or to the presence of loculated areas of pus present in the meninges in pneumococcal cases. These findings are in agreement with Hamburger *et al.*

(1955). Bloor *et al.* found a similar lack of correlation between the sugar content of the CSF and the prognosis in their series of haemophilus infections; in addition they noted that the duration of illness showed no correlation with therapy or clinical results. Schiavone and Rubbo (1953) on the other hand suggest a relation between the severity of infection and the level of CSF glucose. This small series from Durban tends to confirm the findings of Bloor and Hamburger and their colleagues. Patterson (1956) considers that late diagnosis affects the outlook. In our series, treatment was given promptly; in only one case was specific therapy delayed longer than one week from the onset of symptoms, and this patient made an uneventful recovery from his haemophilus meningitis.

In the pneumococcal cases a correlation between the prognosis and the protein content of the CSF was found on first examination of the fluid (the protein was estimated by

TABLE V. PROGNOSIS IN PNEUMOCOCCAL MENINGITIS CASES

	C.S.F. Total Protein		C.S.F. Globulin			
	Under 120 mg. %	Over 120 mg. %	0 to ++	+++ to ++++	++++	+++++
Living	.. 12	2	12	2	9	9
Dead	.. 0	9	0	0	0	0

Total cases 23; $p > 0.001$, considered significant.

turbidometry, using sulphosalicylic acid, and the globulin was tested for by Pandey's reagent). Unfortunately some of the earlier cases were not fully investigated on first examination and only 23 cases could be recovered from the records (see Table V). No such correlation could be demonstrated in the small series of haemophilus infections.

The complications of these two specific diseases are worth considering in greater detail. In the pneumococcal series these were—bed sores and delayed resolution of meningitis (1 case), mental retardation (1 case), iron-deficiency type of anaemia (1 case), relapse of meningitis (2 cases). Only the case of delayed resolution of the acute meningitis and the case of mental retardation did not respond to treatment satisfactorily, and these are considered to be severe complications.

In the haemophilus series the complications encountered were—serous arthritis of the knee (1 case), bronchial asthma (1 case), acute nephritis (2 cases), severe neurological changes (3 cases), relapse of the meningitis (1 case). The cases of arthritis, nephritis and relapsed meningitis cleared up satisfactorily, leaving no apparent sequelae. The asthma commenced after recovery from the meningitis, which was presumed to be the exciting cause, but no further investigations were undertaken to confirm this impression. Margolis (1955) noted that a haemolytic anaemia occurred frequently in his series of haemophilus meningitic cases, but none could be found in this present series. The 3 cases showing gross neurological changes were considered to be most unlikely to recover from the damage to the nervous system; this type of complication was considered to be severe.

McKay *et al.* (1953) noted that subdural fluid occurred in 60% of infantile cases of meningitis. Guthkelch (1953) considered that the prognosis is relatively good in such cases, but Hawkinson and Amadu (1956) stated that early and adequate treatment must be given for this condition. In this present series there were 12 cases of children under 12 months of age. Only one case (that of a haemophilus

infection) was found to have an effusion and in spite of early recognition and prompt and thorough treatment the final state was that of cerebral atrophy with gross mental changes. All the other cases appeared to recover without developing this serious complication, nor was it discovered in the 3 cases that came to autopsy.

CONCLUSIONS

From the results presented in this small series of pneumococcal and haemophilus meningitides, the following comments and conclusions appear justifiable.

1. Both types of meningitis are relatively uncommon in Durban, but they do occur frequently enough to be kept in mind as a diagnostic problem in cases of purulent meningitis. They may occur at any age.

2. The clinical examination may be most helpful in reaching a provisional diagnosis quickly. The meningitis is usually secondary to some other disease, most frequently respiratory or aural; the converse should also be remembered—respiratory or aural disease may produce meningitis as a complication. A diagnostic lumbar puncture must be performed if there is suspicion of a meningitis; the examination of the CSF remains the final, important factor in diagnosis.

3. The initial mortality and numbers of cases showing important sequelae (particularly of neurological origin) still remains disappointingly high. According to Etteldorf (1955), failures in management of these cases are due to slowness in establishing the diagnosis and/or lack of discrimination in the use of therapeutic agents. In this series there was often a delay in reaching even a provisional diagnosis and frequently specific therapy was only given after the bacteriological diagnosis had been confirmed. The adequacy of therapy once instituted, the diagnosis and treatment of ensuing complications and the review of cases after convalescence was satisfactory.

4. Prognosis can be related to the following facts. In pneumococcal cases, the prognosis is worse at the extremes of life; and if the total protein in the CSF was found to be over 120 mg.% on initial examination. If Pandy's test for globulin is strongly positive or if the patient survives longer than 2 days from the onset of meningeal symptoms, then the ultimate prognosis appears to be good.

In the haemophilus meningitis cases however, the only prognostic sign of value seemed to be the presence of convulsions or marked drowsiness, suggesting severe cerebral involvement and possible complications. In general, the mortality is very low but the numbers showing complications is unpleasantly high.

SUGGESTED SCHEME FOR TREATMENT

Bearing the above factors in mind, a broad tentative scheme of treatment for purulent meningitic cases may be outlined.

1. A provisional diagnosis can be made in nearly all cases of pneumococcal or haemophilus meningitis by examination of the CSF deposit, since both organisms can be found after careful search of a Gram-stained film of the exudate. (At the same time it can be confirmed that there actually is a purulent meningitis present.) If some drug or antibiotic has been given before the CSF examination, organisms may neither be found in the film nor grown in culture. It therefore cannot be too strongly emphasized that the in-

discriminate use of any drugs or antibiotics before a provisional diagnosis has been made is to be avoided.

2. As soon as a diagnosis of purulent meningitis has been made, all efforts should be directed to establishing its aetiology. At the same time adequate intensive treatment should be started at the earliest opportunity. It is suggested that initially a broad antibacterial therapy be given—sulphonamides, chloramphenicol, terramycin or achromycin are most useful in this connection—in order to try and deal with any other organisms apart from the ones under discussion. Penicillin is not recommended as a routine at this stage, because resistant organisms causing meningitis may be found. A judicious combination of therapeutic agents will in general, provide an effective 'blunderbuss' form of treatment against most other organisms, but it is unlikely to have an effect on pseudomonas or viral infections. However, the former is very uncommon and the latter are unlikely to be truly purulent, but in cases of real doubt the CSF sugar estimation may be of help.

When the causative organism has been identified bacteriologically, other more selective forms of therapy can be given, but only when such identification has been made is it wise to switch over to more specific treatment.

3. In addition to examination of the stained exudate, which remains the most important single investigation leading to a provisional diagnosis, the CSF is cultured. Furthermore, protein and globulin examinations should be done routinely as a guide to the prognosis in suspected pneumococcal cases. Other investigations may be carried out as indicated, but they do not seem necessary as a routine to establish the diagnosis in such cases of purulent meningitis at present under discussion.

4. A close watch must be kept for insidious development of complications, and for subdural effusions in particular, and all complications should receive prompt and adequate treatment. All cases that recover should be reviewed a few months afterwards, particular attention being paid to any neurological or mental changes that may be present. It is important to remember that subdural effusions or clinically 'silent' localisations of pus in the meninges may still be present even during convalescence.

The above outlined scheme of treatment need not necessarily be followed strictly in every case; it permits of wide adaptations to individual requirements. For example, the presence of typical Gram-negative diplococci seen in a film from the CSF deposit would suffice for a tentative diagnosis of meningococcal meningitis. A purulent meningitis without organisms can be safely treated on combined therapy according to the suggestions mentioned previously. Unless there are very sound reasons, once such a form of therapy is started it should be continued in adequate dosage and not be discontinued until a full course has been administered. In the event of some viral infection not being correctly diagnosed, such therapy may not actually do any good but it does the patient no apparent harm; however, such a contingency must be quite uncommon in practice. Repeated examinations of the CSF may be helpful in assessing progress of the case.

SUMMARY

A review of a small series of pneumococcal and of haemophilus types of meningitis occurring in Durban is presented.

A discussion on diagnosis and prognosis is given, with suggestions on improvement of methods in reaching an earlier diagnosis and earlier institution of therapy.

A brief outline of a scheme for diagnosis and treatment of purulent meningitis cases is presented. This is based on the clinico-pathological findings in this series of cases. The system is readily adaptable to any particular case and can be employed in other types of meningitis apart from the ones considered in the present review.

REFERENCES

- Alexander, J. D., Flippin, H. F. and Eisenberg, G. M. (1953): *Arch. Intern. Med.*, **91**, 440.
 Bloor, B. M., Grant, R. S. and Tabris, J. A. (1950): *J. Amer. Med. Assoc.*, **142**, 241.
 Desmit, E. M. (1955): *Arch. Dis. Childh.*, **30**, 415.
 Etteldorf, J. N. (1955): *J. Amer. Med. Assoc.*, **159**, 746.
 Guthkelch, A. N. (1953): *Brit. Med. J.*, **1**, 233.
 Hamburger, M., Clark, K. L., Biehl, J. P. and Jervey, L. P. *Jnr.* (1955): *J. Infect. Dis.*, **97**, 39.
 Hawkinson, J. and Amadu, L. V. (1956): *Brit. Med. J.*, **32**, 122.
 Koch, R. D. and Carson, M. J. (1955): *J. Pediat.*, **46**, 18.
 Margolis, J. (1955): *Med. J. Austral.*, **1**, 912.
 McKay, R. J., Burlington, V. T., Ingraham, F. D. and Matson, D. D. (1953): *J. Amer. Med. Assoc.*, **152**, 387.
 Meade, R. H. and Weinstein, L. (1956): *Boston Med. Quart.*, **7**, 35. Reported in *Bull. Hyg.* (1956): **31**, 987.
 Patterson, J. H. (1956): *Brit. Med. J.*, **32**, 449.
 Robbins, F. C. and Eiber, R. M. (1954): *Pediat. Clin. N. Amer.*, **409**, 413.
 Schiavone, D. J. and Rubbo, S. D. (1953): *Lancet*, **2**, 696.

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THE MANAGEMENT OF COMMON INFECTIONS OF THE URINARY TRACT

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The successful treatment of urinary tract infection usually depends on the complete diagnosis of the condition. For this, the following queries require answers:

(a) Whether there is in fact an infection of the urinary tract and the particular part involved.

(b) The organisms responsible for the infection and their susceptibility.

(c) The source of the organisms, e.g. tonsils, teeth, etc., and the route by which they reach the urinary tract, viz. by the blood stream, lymphatics, direct spread, etc.

(d) Whether there is predisposing pathology in the urinary tract.

The provisional diagnosis of infection rests on the clinical signs and symptoms, but these may be deceptive and may have no localizing value. Here the simplest and most effective test is to examine the urine for pus cells. In the absence of pus cells the diagnosis of urinary tract infection must always be made with caution, but nevertheless it may exist, as in carbuncle of the kidney, prostatitis in the male, and urethrotrigonitis in the female. It should be remembered that pus cells disintegrate rapidly in highly alkaline urine, more especially in hot weather, and that this type of urine is usually associated with a serious infection. The presence of organisms without pus cells may also be due to contaminants or occasionally to bacilluria.

A valuable test in localizing the infection is the two-glass test, where the patient passes his urine as a first and second portion into two glasses. A cloudy first glass due to pyuria and a clear second glass indicate infection distal to the bladder and also the absence of infection in the bladder, and of course in the kidneys too. This test is more valuable in the male but can also be applied to the female, where pyuria in the first glass and not in the second indicates infection of the genital tract and not of the bladder.

A common feature of urinary tract infection is the liability to rigors. This occurs in infections of the kidney, especially with an obstructive lesion like a ureteric calculus, in prostatic infections (more particularly post-operatively), and with urethral stricture after an instrumentation. The probable

reason is the ready communication which can be established between the urine of the urinary tract and the venous system (a) at the fornices of the calyces of the pelvis, (b) in the prostate, and (c) in the cavernous tissue of the corpus cavernosum urethrae.

The common infections, excluding renal tuberculosis, will now be considered on a more detailed basis, starting with the urethra.

URETHRITIS

The commonest cause of urethritis is still venereal infection. The discharge should be tested to identify the organism. In a young man it is a good routine to examine the penis before urination. The gonococcus responds in about 100% of cases to penicillin in adequate dosage. Non-specific infection and abacterial urethritis appear to be on the increase. These often respond to terramycin, one capsule 4-hourly for 4 days. Abacterial urethritis is liable to spread to the bladder and prostate, and also occasionally to the kidneys. It responds in a specific fashion to intravenous Novarsenobillon, starting with 0.15 g. and then 0.3g., which is repeated at 3-day intervals for 5-6 injections. When the urethritis is not directly venereal one must consider secondary urethritis, of which the following are common causes: urethral stricture, foreign body such as indwelling catheter, and strong chemicals often used in a misguided attempt to cure a possible venereal infection. The respective treatment would be dilation of the stricture, removal of the foreign body, and the treatment of the complications of a strong chemical, viz. secondary infection and stricture formation.

PROSTATITIS

With or without vesiculitis, prostatitis is a fairly common condition in the male. It may be acute or chronic. In the acute condition the common organism is the staphylococcus pyogenes aureus, usually blood-borne from a septic focus in the skin. The diagnosis is usually easy, with a combination of general symptoms, viz. toxæmia, fever with occasional

rigors, and local referred pain associated with difficult micturition, which may amount to retention. The rectal examination will reveal an abscess or a subacute inflammation, without an obvious collection of pus. Where pus is diagnosed, this should be drained by the perineal route. In the less advanced cases the patient is put to bed, if necessary a catheter is tied in with continuous drainage, and a course of penicillin and streptomycin, $\frac{1}{2}$ million units and 1 g. respectively, twice daily, is given for 5 days. Acute prostatitis due to the gonococcus is far less common to-day than formerly, when it was often produced by the heavy hand of the examiner performing a rectal examination during the first two weeks of the infection.

Chronic prostatitis is a relatively common condition and may be symptom-free or associated with a marked variety of symptoms. These may be local, in the form of periodic attacks of referred pain, dysuria and occasional haematuria, usually terminal; or general, and due to toxic absorption producing fibrositis, arthritis or irido-cyclitis. After many years the inflammation may produce fibrotic obstruction of the bladder neck. The prostatitis might originate from other parts of the urinary tract, e.g. ascending infection resulting from urethritis or urethral stricture, descending infection due to renal tuberculosis, or infection associated with calculi in the bladder or kidneys, etc. It might also be blood-borne, usually from such foci as infected teeth, tonsils and nasal sinuses. Treatment consists of (1) eradication of distant foci of infection, if possible; (2) local treatment in the form of prostatic massage and diathermy at 3-4 day intervals for 1-2 months, care being taken not to exacerbate the condition by too vigorous treatment; (3) antibiotics and urinary antiseptics. These will not eradicate the chronic prostatitis, but will usually deal with any spread of infection beyond the prostate, e.g. to the bladder. On occasion surgical treatment may be indicated, such as irrigation of vesicles through bilateral vasotomy, prostatic resection with loop or cold punch and, very rarely, subtotal prostatectomy or vesicectomy.

CYSTITIS

In the male this is almost always secondary to some associated condition of the urinary tract, e.g. ascending infection from prostatitis and urethral stricture, descending infection from a kidney lesion, or additional pathology in the bladder itself, viz. urinary stasis resulting from bladder-neck obstruction, vesical diverticula or neuro-muscular defect, or from stones, foreign body or malignant new-growth. It is worth noting, that post-operative infection of the bladder, e.g. after prostatectomy, will usually persist for 2-3 months, but if it goes on longer, it should be further investigated. There may also be direct spread of infection from the adjoining organs, such as diverticulitis of the large bowel, appendix abscess and (in the female) pyosalpinx.

In the female, primary infection of the bladder is common, partly because of the short urethra, which allows ready access of organisms from the exterior, as in faulty hygiene. The commonest syndrome is that known as urethro-trigonitis. This occurs in the adult female, more particularly after the menopause, and is characterized by recurrent attacks of dysuria with completely normal periods in between. The urine may be completely clear or show the common features of infection, usually with *B. coli*. Cystoscopy may also be negative or show marked polypoidal overgrowth at the bladder

neck together with other inflammatory changes. The original focus of infection is usually the cervix, whence the infection spreads via the lymphatics to the urethro-trigonal area. Treatment consists of (a) adequate treatment of the cervix, which may have to be very thorough, (b) the appropriate urinary antiseptic or antibiotic, and (c) local treatment. This may consist of local instillation of 1% solution of silver nitrate into the urethra and thus into the bladder, 5-10 c.c. at a time at intervals of 4-7 days. Dilatation of the urethra and coagulation diathermy through the cystoscope may also be indicated. Usually the response is good, but occasionally it is disappointing.

Among the causes of secondary cystitis in the female are the following: Urinary stasis due to (a) obstructive lesions, and (b) atony. *Obstructive lesions* include the retroverted gravid uterus, cervical fibroid, urethral stricture and bladder-neck obstruction. The latter lesion occurs as a congenital abnormality, and also in post-menopausal females in association with long-standing chronic infection of the bladder neck, which ultimately produces an obstructive condition resembling that seen in the male. Its treatment is by resection of the bladder neck with the punch or loop resectoscope. *Atonic lesions* may be the result of neurogenic defect or prolonged over-distension such as occurs after perineal operations or childbirth. This over-distension leads to early loss of tone, with a resultant overflow-incontinence which may be mistaken for true incontinence so that the over-distension is missed. The treatment here is preventive in the first place, but once the condition has become established, continuous drainage must be instituted with an indwelling Foley catheter, which may have to be maintained for 2-3 weeks before the bladder regains its tone. Apart from urinary stasis, another cause in the female is a foreign body, often accidentally introduced in an attempt to produce an abortion.

Cystitis by itself very seldom produces toxæmia or fever of note, and the presence of this should always make one suspect some further complication.

In infants cystitis is fairly common, especially in the female, where it may be due to faulty hygiene. When the infection becomes chronic, i.e. when it persists for more than 4 weeks, or if it constantly recurs, a full investigation is called for, by intravenous pyelography and cystoscopy. Congenital abnormalities are common. An example of this is a high opening of the urethra in the vagina associated with a partial septum across the vulva, leading to an infected sump from where spread takes place back to the bladder.

RENAL INFECTIONS

The diagnosis of renal infection is not always obvious and it may be missed. In most cases the typical distribution of pain, together with tenderness in the loin, fever and pyuria, give the diagnosis. In acute fulminating cases, especially if secondary to an obstructing stone, the pain may be referred diffusely over the abdomen and is often associated with marked distension. However, the maximum tenderness is usually in the corresponding renal angle. Often, again, the infection is silent and may only be revealed by intermittent pyuria, leading to a full investigation.

Pyelitis and Pyelo-Nephritis

These conditions may be primary, more particularly in the female, and are usually blood-borne from a focus elsewhere

in the body, such as the bowel, teeth, tonsils and nasal sinuses, and the heart in subacute bacterial endocarditis. The cause of the localization of the infection to the kidney is probably a transient lowering of resistance resulting from trauma or a severe chill, etc. The lesion may lie dormant, even the urine being normal, and only give rise to symptoms and signs with exacerbations. With the passage of time the kidneys may undergo marked impairment, which leads to complications such as hypertension, and ultimately to uraemia. The treatment is based on the removal of the original focus of infection where possible, and the administration of the appropriate urinary antiseptic or antibiotic. Recently it has been advocated that these drugs should be given continuously for as long as 6 months. It would be advisable to change from one drug to another every now and then if so long a course of treatment is undertaken.

Pyelitis of pregnancy occurs in 1-5 % of cases, with a maximum incidence during the 6th month. The underlying cause is urinary stasis secondary to physiological dilation of the renal tract due to (a) hormonal factors producing atony, and (b) mechanical factors which, exacerbate it and cause obstruction at the pelvic brim, especially on the right side. The usual organism is *B. coli*, generally bloodborne from the bowel. The patient is liable to recurrent attacks, more particularly in the puerperium, where it constitutes 10% of cases of pyrexia. It usually responds adequately to sulphonamides such as gantrisin, or to the antibiotics. Induction of premature labour was occasionally necessary in the days before the discovery of modern antiseptics and antibiotics.

Suppurative Pyelonephritis or 'Surgical Kidneys'

This may be caused by infection above an impacted ureteric calculus or to ascending infection from an infected and obstructed bladder due to an enlarged prostate. The infection is sometimes extremely serious, with severe toxæmia, uraemia, rigors and septicaemia. When an impacted stone is the cause of the trouble it may have to be removed as an emergency if the infection cannot be controlled by the appropriate antibiotics. Even then the case must be closely watched. In prostatic obstruction the treatment will include continuous drainage by an indwelling urethral catheter. Because of the grave risk of ascending pyelo-nephritis, a catheter should always be passed with every precaution to avoid the introduction of infection. This applies particularly to the chronic over-distended bladder, when the patient usually feels no pain in the bladder and is unaware of its condition. His only complaint may be incontinence. 'I pass water too freely', he says. The emptying of such a bladder by catheterization will always lead to refilling and distension. If infection is introduced at the same time, the risk of ascending infection to the kidneys is a grave one. Hence such a bladder should never be catheterized in the patient's home, but only under optimal conditions in a nursing home or hospital. It is in this type of case that some surgeons advocate prostatectomy without previous instrumentation of the patient except on the operating table.

The causes of secondary renal infection may be considered under two main headings, viz. congenital and acquired. *Congenital* causes are common and are usually the result of urinary stasis caused either by mechanical obstruction or neuro-muscular defect. *Acquired* causes include stone, tumour, stricture and trauma. Occasionally infection may spread up in the tissue spaces enclosed by the renal fascia

and extending from the pelvis up to the kidney. Thus in the female, infection in the generative organs, e.g. the cervix, may lead to renal infection. Perinephric abscess may at times be difficult to diagnose, being one of the causes of pyrexia of unknown origin. It may settle down on appropriate antibiotic therapy, but once pus is diagnosed it should be drained by open operation.

In infancy and childhood pyelitis is relatively common, more particularly in the female. It is usually a blood-borne infection, but may be ascending. The common organisms are *B. coli* and *Streptococcus faecalis* from the bowel and gram-positive cocci from the throat. The infection is usually self-limiting but where it becomes chronic or recurrent a full investigation is called for. Congenital abnormalities are common. Renal tuberculosis must be kept in mind, as in the early stages it may cause an intermittent pyuria which appears to respond to sulphonamides. The child is often peevish and fails to gain weight. Infection of the urinary tract may be an incidental feature in infection of other organs, e.g. gastro-enteritis, and of considerably less importance, clearing up spontaneously once the primary source of infection has been dealt with.

DRUGS

Today the choice of effective drugs is wide. Nevertheless some members of the *B. coli* and proteus group are very difficult to control. Potassium citrate mixture is still of use. It acts as an adjuvant to streptomycin and increases the solubility of the sulphonamides. If given in a quantity sufficient to render the urine alkaline, it will control *B. coli* infection but will not eliminate it. It should not be used for an indefinite period, because it increases the liability to the production of phosphatic calculi especially in the re-cum-bent patient.

Mandelamine acts in an acid medium. The pH of the urine should be 5.5 as tested with nitrazine paper. It is of value particularly against the *B. coli* and *Str. faecalis* group. The adult dose is 2-3 tablets 4 times a day, and fluids should be restricted to 2 pints a day. The drug is relatively non-toxic except in renal failure and can be given for long periods of time, 1-2 weeks, without a break.

The sulphonamides are more powerful and also more toxic. Gantrisin is probably the most useful for the *B. coli* group; the adult dosage is 2-4 tablets, 4 times a day. Sulphatriad is a useful and safe drug in the dosage of 1 tablet 4 times daily. It is wise not to give the sulphonamides for more than 5 days without a break or change.

The Antibiotics. Here we have a great and growing variety of very powerful drugs. Their disadvantages are:

1. Toxicity and sensitization reactions.
2. Development of resistance by organisms once susceptible. With streptomycin this may take place in only a few days.
3. The emergence of new pathogenic strains which have hitherto been kept in control by the organisms destroyed by the antibiotics, e.g. fungi and *Staphylococcus pyogenes*. The latter may lead to a fatal enteritis.
4. Interference with vitamin production by organisms in the bowel. Hence with antibiotics it is advisable to give both vitamin B and vitamin C, especially if the patient is elderly and on a limited diet.

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non-specific pyogenic infections, the urine clears up dramatically. Should there be no response within 3 days, then it is advisable to change the antibiotic. A relapse usually means some further complication, e.g. stone, urinary stasis, etc. It is of great value to have the urine cultured and the organisms tested against the various drugs for sensitivity, even though this is not always an infallible guide. When complications are known to exist, it is advisable to keep one of the powerful antibiotics in reserve to cover the operation or other emergency that may arise. It has been suggested that, as in

infection with the tubercle bacillus, a combination of drugs may be used to prevent the emergence of resistant strains. Until this has been put on a sound scientific basis it is probably better to use one antibiotic at a time with the exception of the combination of penicillin and streptomycin. The use of these powerful drugs prophylactically calls for careful judgment and as a routine measure it is to be condemned.

It should also be remembered that the most important factor in overcoming an infection is still the natural resistance of the host.

URINARY LITHIASIS IN AN AFRICAN

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Urinary calculi have been known for thousands of years; thus reference is made to the operation of cutting for stone in the Hippocratic oath and the Romans gave an accurate account of the condition.

Although urinary lithiasis is found quite frequently in the European,¹⁻³ it appears to be a comparatively rare condition in the African; only a few cases are found reported in the literature.³⁻⁵

The aetiology of urinary calculi in man is still obscure. There is no single cause of urinary stone formation and many factors are implicated in the pathogenesis of urinary calculi, such as stasis, infection, the pH of the urine, diet, climate, metabolic derangements, endocrine disorders, heredity, etc.

Particular importance is attached to vitamin-A deficiency. Experiments on rats deficient in vitamin A showed that 88% developed bladder calculi and 41% renal calculi.⁶ Studies on the blood of healthy Africans reveal no vitamin-A deficiency.⁷

In White people the recommended allowance for calcium is 10 mg. calcium per kg. of body-weight *per diem*. The calcium intake of the African is often 1/3rd of this; this 'unsatisfactory' calcium intake may be one of the causes of the low incidence of renal stone in the Bantu. According to Freeman,⁸ urinary calculi were seldom encountered when the amount of urinary calcium was less than 150 mg. per litre. Indeed, the calcium content both of serum and of urine in the African is less than that of the White subject.⁹ Sager and Spargo¹⁰ have shown in experiments on rats that the ratio of calcium to phosphorus in the diet is of great importance. Thus, a diet normal in calcium and low in phosphorus content results in excessive absorption of calcium and therefore the formation of urinary calculi. The African's diet, on the contrary, is high in phosphorus and low in calcium.

Furthermore, it has been observed that the volume of urine voided by the African is greater than that of the White subject.¹¹ This may help to prevent the precipitation of crystals and thus the formation of calculi.

Investigations carried out by Butt¹² in Negro and White subjects showed that the colloidal activity of the urine was higher in the Negro than in the White subject. In the same series there was only one Negro whose urine showed no colloidal activity, and he had a renal stone.

Only 2 investigations appear to have been made into the incidence of stone in the African. Vermooten¹³ reports an incidence of stone in the urinary tract of 2 in 1,091,000 South African Bantu as compared with 1 in 460 South African White patients; Gelfand reports that of 20,032 Africans admitted to Salisbury Native Hospital 0.07% had calculus of the urinary tract and of 14,442 Europeans admitted to the Salisbury European hospital 0.15% had urinary calculi. Thus, urinary calculus appears to occur much less frequently in the South African Bantu than in the African living in Southern Rhodesia. As diet is very much the same in both countries and bilharziasis rife in most African territories, the variation in occurrence may perhaps be due to climatic differences. Physical exertion under conditions of high temperature may create water depletion which encourages the precipitation of urinary crystals and the formation of calculi.

We present a case of a 31-year-old male African who was suffering from vesical calculi probably caused by bilharziasis with secondary infection.

CASE REPORT

S.F.N., a Shangaan tailor, was admitted to the Hospital Da Missao Suica, Chicumbane, on 20 May 1956, complaining of difficulty and pain during micturition and defaecation. He gave a history of vesical bilharziasis contracted in 1949 and treated at the Methodist Mission Hospital at Chikuki, and of gonorrhoea contracted in 1953. In March 1954 he reported back to Chikuki hospital complaining of pain on micturition and defaecation. When told that he would have to undergo an operation he tried Native remedies, but when the condition failed to improve he sought medical advice at Chicumbane hospital.

Local inspection of the abdomen revealed a tumour in the suprapubic region which was of the size of a 4-months pregnancy. When the tumour was palpated and the bladder explored with

a sound the noise of grinding stones was audible. On rectal examination calculi could be felt in the bladder.

Urine examination showed gross haematuria. On microscopic examination innumerable erythrocytes and polymorphonuclear leucocytes were observed. Repeated urine and stool examinations for *Schistosoma haematobium* were negative. The haemoglobin content of the blood was 15.6 g. per 100 ml. (Sahli) and the ESR was 22 mm. in 1 hour.

On June 1956 a suprapubic cystotomy was performed and 6 large stones were removed (Fig. 1). Their weight was 840 g. in the wet state and 730 g. in the dry. The patient's recovery



Fig. 1

from the operation was uneventful, his urine became clear, and he asked for his discharge on 2 July 1956. The stones were oval in shape, compact, smooth and off-white in colour. One calculus was sawn through the centre and the arrangement of concentric rings around a central nucleus was clearly seen (Fig. 1). Chemical analysis of the scrapings from the various layers showed them all to be of the same composition, that is to say 'triple phosphate' (ammonium magnesium phosphate). Tests for calcium carbonate, calcium oxalate, uric acid, cystine and xanthine were negative. The identification both of the core and the surface layer as ammonium magnesium phosphate was confirmed by infra-red spectroscopy. The largest calculus weighed 155 g.

DISCUSSION

The uniformity of composition of each layer of the one stone examined would suggest that this stone and probably the other 5 originated in the bladder and not in the kidneys. The size and number of the stones caused obstruction to the urinary outflow. This is always a serious complication since it may result in pyelonephritis and hydronephrosis.

THE DIAGNOSIS AND MANAGEMENT OF CASES OF LEPROSY

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Medical Superintendent, Westfort Institution, Pretoria

It is a simple matter to establish the diagnosis of leprosy if it is remembered that there are two different types of the disease. In the lepromatous type (in which there is a sub-group called 'border-line') the diagnosis cannot be made unless leprosy bacilli are found in the skin. In the second type, called tuberculoid (with a sub-group called 'indeterminate') the diagnosis cannot be made unless nerve involvement is demonstrated. This is shown by anaesthesia of the maculae, or by anaesthesia of the extremities, or by thickening of the nerves.

LEPROMATOUS LEPROSY

In the lepromatous or border-line patient the lesions appear as infiltrations of the skin. The areas that are particularly affected are the face, the ears and the extremities, though other parts of the body may be affected. The infiltration may be slight and hardly discernible, or it may be so marked that the folds of the skin form rugae producing the so-called 'leonine facies'. An early sign of infiltration is the loss of hair—particularly of the eyebrows. The other lesions in lepromatous or border-line leprosy are infiltrated patches of skin called plaques. These are usually elevated, and the centres are as much elevated as the margins. Another type

of lesion is the discrete nodule, which arises from infiltrated skin and may be small or large. Lepromatous leprosy also attacks the eyes, the nose, the mouth, the pharynx and larynx, as well as the liver, spleen, testes and lymph glands. Involvement of the inguinal glands causes oedema of the legs. Erythema nodosum is a common complication and one which may lead to the diagnosis of leprosy. Nerve involvement is not a feature of this type of the disease, but all the lesions described will be found positive for *Mycobacterium leprae* if Wade's 'scraped incision' method of making a smear, as set out below, is adopted:

Two years elapsed between symptoms and surgical treatment and it is not known what kidney damage had occurred because the patient discharged himself before any kidney function tests could be carried out.

It would seem that in this case the predisposing cause for urinary calculus formation was bilharziasis. In the majority of cases bilharzia is not thought to be an important factor, as is shown by the fact that the Europeans who suffer from urinary calculi, are seldom the victims of bilharzia. However, should secondary infection be a complication of bilharziasis (as in this case), particularly an infection where urea-splitting organisms are present, the urine would become more alkaline and this might well favour the precipitation of phosphates and thus the formation of calculi.

We wish to express our thanks to Prof. E. H. Cluver, Director of the South African Institute for Medical Research, for his encouragement and to Dr. P. Odendaal of the South African Bureau of Standards for the analysis of the stone by means of infra-red spectroscopy.

REFERENCES

1. Holmes, R. J. and Coplan, M. M. (1930): *J. Urol.*, **23**, 477.
2. Joly, J. S. (1931): *Stone and Calculus Disease of the Urinary Organs*. St. Louis: C. V. Mosby Co.
3. Vermooten, V. (1937): *J. Amer. Med. Assoc.*, **109**, 857.
4. Lopis, S. and Kaplan, S. A. (1948): *Clin. Proc.*, **7**, 103.
5. Gelfand, M. (1950): *Schistosomiasis in South Central Africa*, p. 63. Cape Town: Juta & Co.
6. Higgins, C. C. (1933): *J. Urol.*, **29**, 157.
7. Kinnear, A. A. (1956): *S. Afr. J. Lab. Clin. Med.*, **2**, 263.
8. Freeman, L. W. (1949): *Ann. Surg.*, **129**, 177.
9. Walker, A. R. P., Arvidsson, U. B. and Politzer, W. M. (1954): *S. Afr. Med. J.*, **28**, 48.
10. Sager, R. H. and Spargo, B. (1955): *Metabolism*, **4**, 519.
11. Walker, A. R. P. (1956): *Nutr. Rev.*, **14**, 321.
12. Butt, A. J. (1952): *J. Urol.*, **67**, 450.
13. Vermooten, V. (1937): *J. Amer. Med. Assoc.*, **109**, 857.

of lesion is the discrete nodule, which arises from infiltrated skin and may be small or large. Lepromatous leprosy also attacks the eyes, the nose, the mouth, the pharynx and larynx, as well as the liver, spleen, testes and lymph glands. Involvement of the inguinal glands causes oedema of the legs. Erythema nodosum is a common complication and one which may lead to the diagnosis of leprosy. Nerve involvement is not a feature of this type of the disease, but all the lesions described will be found positive for *Mycobacterium leprae* if Wade's 'scraped incision' method of making a smear, as set out below, is adopted:

Method of making a scraped incision smear

1. Select an ear-lobe, an infiltrated area or a nodule and render it bloodless by compression between finger and thumb.
2. With a broad-bladed knife make an incision the length and depth of the head of a match.
3. Scrape the base and sides of the incision by turning the knife blade transversely and transfer a thin film of the pulp to the slide.
4. Fix the film by lightly flaming or by exposure to air. Do not expose to direct sunlight.

5. As a rule the small amount of bleeding ceases spontaneously. Occasionally the application of collodion or compound tincture of benzoin on a wisp of cotton wool may be necessary.

Slides will be examined free of charge if addressed as follows:
(a) From Southern and Western districts of the Cape Province: to the Government Pathologist, Government Pathological Laboratory, Cape Town (telegrams 'Health', Cape Town).

(b) From Natal and Zululand: to the Government Pathologist, Government Pathological Laboratory, Currie Road, Berea, Durban (telegrams 'Health', Durban).

(c) From the Transvaal and Orange Free State, and districts of the Northern and Midland Cape Province: to the Director, South African Institute for Medical Research, Johannesburg (telegrams 'Bacteria', Johannesburg), or the Superintendent, Port Elizabeth Branch, South African Institute for Medical Research, Port Elizabeth or Kroonstad or Bloemfontein, whichever is the most convenient.

(d) From districts of the Eastern Province and the Transkei: to Border Pathological Laboratory, East London.

TUBERCULOID LEPROSY

The skin lesions of tuberculoid leprosy are usually annular, with an elevated margin and a hypopigmented flat centre. The margin is often erythematous but may be dusky or desquamating. The centre is only relatively hypopigmented and pigment may return when the lesion is healed. The centre is frequently anaesthetic to touch with a wisp of cotton wool. This anaesthesia is not stable, i.e. it may be present or absent at a particular examination. The lesions may be insensitive to a pin-prick, and this anaesthesia usually persists even after the pigmentary changes have resolved completely. A third type of anaesthesia is that which is commonly found in the distribution of the ulnar and peroneal nerves. This anaesthesia is stable and is the cause of claw hands and perforating ulcers of the feet. If anaesthesia to cotton wool or a pin-prick cannot be established the lesion should be tested for thermal anaesthesia. A test tube with hot water and another with cold water are placed alternately on the lesion. If anaesthesia is present the patient will not be able to distinguish between heat and cold.

Thickened nerves are not uncommon in tuberculoid leprosy. No nerve is exempt, but those commonly affected and readily palpable are the ulnar nerve, the peroneal nerve and the posterior auricular plexus. The latter is demonstrated by putting the sternomastoid muscle on the stretch and palpating over this.

The typical tuberculoid macule has been described, but other types may occur. The margins may be flat and hypopigmented or they may be granular and elevated. The whole lesion may be elevated and erythematous. Sometimes these elevated lesions have a thinner epidermis, giving them a succulent appearance. Such lesions are frequently positive for *M. leprae* when examined by the scraped-incision method. The presence of bacilli naturally clinches the diagnosis, but a negative finding is more usual. At least 80% of tuberculoid cases show no bacilli in the skin or nose on routine examination.

Indeterminate Leprosy

The lesions of indeterminate leprosy are pale or red flat patches in which either bacilli or anaesthesia may be found.

HALF-YEARLY MEETING OF THE SOUTH AFRICAN MEDICAL AND DENTAL COUNCIL

The South African Medical and Dental Council held its 6-monthly meeting at the Archives Building, Cape Town, on 11-14 March 1957. The President (Prof. S. F. Oosthuizen) was in the chair and 29 members were present, together with the Registrar, Mr. W. Impney and staff. The proceedings occupied 8 morning or afternoon sessions.

Prof. J. C. Middleton Shaw, who represented the Witwatersrand University in respect of its Dental Faculty, having resigned from the University, was no longer a member of the Council, and the University had appointed Prof. J. Staz, Acting Dean of the Dental Faculty, as its representative in his place. The President spoke of the sterling services which Professor

GENERAL

Leprosy in the Union may not be treated by private practitioners. In terms of section 18 of the Public Health Act, No. 36 of 1919 leprosy is a notifiable disease and therefore, all cases must, in the first instance, be notified by medical practitioners to the local authority in whose area the case is found.

The forms to be completed by the medical practitioners vary slightly in the different provinces. They are obtainable from the magistrate:

Cape Province. (1) Medical report on form 318 (Health) and (2) one medical certificate on form 329 (Health).

Transvaal and Orange Free State. (1) Medical report on form 318 (Health) and (2) 2 medical certificates on form 327 (Health, or only one where only one medical practitioner is available.

Natal. Form 318 (Health) only.

All Provinces. In emergency or special circumstances, patients irrespective of race, may be removed to leper institutions under section 25 of the Public Health Act, No. 36 of 1919. In terms of this Act, where there is no constituted local authority, the magistrate of the district is the local authority (section 9) and the district surgeon is the medical officer of health to the magistrate *qua* local authority section 12(3). In his capacity as medical officer of health, the district surgeon is empowered by section 23 to enter and inspect premises and medically examine any person to ascertain whether he is suffering or has recently suffered from any infectious disease and if any person found to be suffering is not accommodated or being nursed or treated in such manner as to guard adequately against the spread of the disease, he may, in terms of section 25, issue an order requiring such person to be removed to a hospital or place of isolation and there detained until he is satisfied that the affected person is free from infection or can be discharged without danger to the public health. The powers so conferred should be exercised whenever necessary or desirable in respect of leprosy patients or suspects.

Contacts

It is essential that all close and intimate contacts of a leprosy patient should be carefully examined by the district surgeon at the time the patient is certified to be suffering from leprosy. These examinations should not be casual or incomplete. Full inquiries must be made with a view to discovering all close and intimate contacts to ensure that they are medically examined.

The examination of contacts should be arranged and carried out with tact and consideration and without publicity.

Special reports on form 434 (Health) should be made on all such examinations. Smears should be taken and forwarded for laboratory examination only in those cases where the symptoms or signs are suggestive of leprosy.

In addition to the initial examination, contacts should be re-examined during the second year and again during the fifth year following the removal of the patient. Under the Leprosy Regulations (Government Notice No. 601 of 10 April, 1931), contacts are required to inform the magistrate or native commissioner of any change of address and they can be ordered to attend for examination at the district surgeon's headquarters.

I have to thank the Secretary for Health, Pretoria, for permission to publish this article.

Middleton Shaw had rendered during the many years that he had sat on the Council.

The Financial Statement was submitted by the Treasurer (Dr. I. R. Vermooten). For the year 1956 income had exceeded expenditure by £3,499. The income included the following items: Annual fees £24,610, and registration fees paid by medical practitioners £5,310, dentists £1,170, specialists £708, interns £494, medical and dental students £739, auxiliaries £442. The accumulated funds now amounted to £24,988.

REGISTRATION

The Registrar reported on registrations effected during 1956, as follows:

	Registra- tions	Restora- tions	Erasures	On Register 31/12/56
Medical Practitioners	353	35	177	7,198
Interns	247	—	302	391
Dentists	78	7	36	1,200
Medical Students ..	293	4	291	1,182
Dental Students ..	65	1	89	218
Auxiliaries	92	—	1	874
Specialists (Medical)	101	4	35	1,312
Specialists (Dental)	2	—	—	15

Of the medical practitioners on the register, 69.4% had qualified in South Africa (Cape Town 2,247, Witwatersrand 2,188, Pretoria 684), 13.0% in England, 10.75% in Scotland, 3.7% in Ireland and 3.1% elsewhere.

Of the medical students on the register (including 322 who qualified in June and December 1956) 497 were at the University of Cape Town, 495 at Witwatersrand, 342 at Pretoria and 91 at Natal.

The specialists on the register at the end of 1956 were as follows (figures in brackets represent the nett increase since the beginning of the year): Medicine 181 (6), surgery 165 (10), obstetrics and gynaecology 114 (3), anaesthetics 107 (7), ophthalmology 102 (3), radiology 76 (6), radiology and electrotherapeutics 37 (0), diagnostic radiology 27 (4), therapeutic radiology 5 (1), pathology 75 (11), otorhinolaryngology 68 (4), psychiatry 66 (—1), pediatrics 65 (3), orthopaedics 59 (7), urology 36 (1), dermatology 32 (2), neurology 26 (—1), venerology 18 (2), neuro-surgery 16 (3), physical medicine 16 (0), thoracic surgery 15 (—1), plastic and maxillo-facial surgery 6 (0), Dental specialists: Orthodontics 10 (2), maxillo-facial and oral surgery 5 (0).

The auxiliaries on the register were as follows: Physiotherapists 332 (26), masseurs 151 (4), medical technologists 99 (22), health inspectors 51 (0), food inspectors 45 (0), occupational therapists 43 (13), orthopaedic mechanics and surgical-appliance makers 43 (2), chiropodists 34 (1), radiographers 30 (8), diagnostic radiographers 16 (10), speech therapists 20 (1), dieticians 4 (0), psychologists 3 (3), orthoptists 2 (1) and optometrists 1 (0).

Registration: Decisions taken at Present Meeting

Limited Reciprocity with the Netherlands. It was resolved to fix 12 as the quota of medical practitioners from the Netherlands registrable in 1958. The same number was fixed in each of the two previous years, but the actual number of registrations was 5 and 7 respectively.

Limited Registration. The registration of one practitioner in missionary practice was extended for a further 5-year period, and one was transferred to another district. Registration was granted to one medical practitioner working in a scientific institution, and refused in one case.

Visiting Practitioners: 4 practitioners visiting the country had been exempted from registration requirements (sec. 74 b).

Elderly Practitioners: Applications for exemption from payment of annual fees was granted to 7 medical practitioners and 1 dentist.

Removal from Register. Erasures at own request: 10 medical practitioners, 3 dentists. For failure to pay annual fee: 83 medical practitioners, 13 dentists. For failure to notify change of address: 3 medical practitioners, 3 dentists.

Specialist Registration. At this meeting 26 applications for the registration of specialties were granted (12 of them under Rule 6—previously Rule 12). In addition, 23 applications were granted subject to compliance with certain requirements, and 17 were refused. Some 23 other cases were reported in which decisions or advice have been communicated to applicants.

Minimum Standards of Medical Education. In an intensive investigation into this subject numerous memoranda and reports obtained from universities and other authorities on the subject of medical and dental education were submitted to the Council. A sub-committee consisting of Prof. M. van den Ende and Prof. G. A. Elliott (with the President) was now appointed to prepare

alternative sets of regulations relating to the minimal medical curriculum, and a sub-committee consisting of Prof. H. H. Louw and Dr. R. Hofmeyr (with the President) to draft sets for the dental curriculum.

Stellenbosch Qualification. The degree M.B., Ch.B. (Stellenbosch) was added to the list of qualifications entitling to registration in terms of section 22.

Teaching Hospitals. Recognition as teaching hospitals or departments (or as the equivalent of a teaching hospital or department) was extended to various hospitals and departments, both in South Africa and the UK. The following departments of the Karl Bremer Hospital, Bellville, were recognized as teaching departments: Department of Medicine (1 grade-A post, 1 grade-B post), Surgery (1A, 1B), Obstetrics and Gynaecology (1C, 1B), Paediatrics (1C), Urology (1C), Anaesthetics (2A or C).

Radiology. The date of the discontinuance of the registration of the specialty Radiology (in favour of Diagnostic Radiology and Therapeutic Radiology) was postponed from 1 January 1958 to 1 January 1959.

Higher Degrees, University of Cape Town. It was decided to amend the Council's regulations to meet the replacement of the Cape Town degrees Master of Surgery-Surgery, Master of Surgery-Orthopaedics, Master of Surgery-Otorhinolaryngology, Master of Surgery-Ophthalmology and Master of Obstetrics and Gynaecology with the following: Master of Medicine-Surgery, Master of Medicine-Orthopaedics, Master of Medicine-Otorhinolaryngology, Master of Medicine-Ophthalmology and Master of Medicine-Obstetrics and Gynaecology. (The degree of Ch.M. will continue to be granted by the University of Cape Town, as before 1954, subject to the submission of a thesis showing a high standard of academic ability.)

College of Physicians and Surgeons of South Africa. At this meeting of the Council the College regulations for the examinations of the College (Fellowship in Surgery, Fellowship in Medicine and Membership in Obstetrics and Gynaecology) were accepted in principle as 'additional qualifications', to be added in due course to the list of higher qualifications acceptable for specialist registration. The College examinations are to be subject to inspection by the Council.

Higher Qualifications. The Diploma in Anaesthesia (D.A.) of the University of Sydney and a number of other overseas qualifications were accepted as additional qualifications and as higher qualifications for specialist registration.

Registration of Degrees. It was decided to revert to the traditional practice of the Council (which had been departed from comparatively recently) that medical and surgical degrees should be registrable on production of certificates certifying that the degree had been completed and would be conferred at the next graduation ceremony.

Inspectorate of Internships. In view of the discontinuance of the office of full-time inspector following the withdrawal of the *ad hoc* Government subsidy, the Council decided on a scheme of routine inspection (once in 3 years) of hospitals approved for interns, to be carried out by members of the Council conveniently located for prearranged tours of inspection.

Occupational Therapists. The Diploma of Occupational Therapy granted by the Astley Ainslie Institution and School of Occupational Therapy, Edinburgh, was accepted under the Council's rules for the registration of occupational therapists. The German State Certificate in Occupational Therapy was similarly accepted. The syllabus of training of occupational therapists of the Pretoria School of Occupational Therapy was conditionally approved.

COMPLAINTS CONCERNING PRACTITIONERS

Disciplinary. Complaints concerning medical practitioners were considered in 30 cases and against dentists in 4 cases in which the Council accepted the decision of the Executive Committee not to hold formal enquiries. In certain of these cases, where fees were questioned, complainants were advised of the procedure provided in section 80(bis) for the assessment of accounts.

Assessment of Accounts. In 5 cases assessors were appointed under section 80 (bis). In 2 cases reports of assessors were noted. In 27 cases persons who submitted queries to the Council in regard to fees under section 80 (bis) were advised of the procedure prescribed by this section.

Disciplinary Enquiries. In 5 cases it was reported that disciplinary enquiries had been held. In the following cases the proceedings and findings of the enquiries were reported to the Council:

(1) Dr. A.N.V.D. Found guilty of disgraceful conduct in that he had been convicted in the Supreme Court on one count of attempting to procure abortion and one count of procuring abortion, subsequently confirmed by the Appellate Division. Penalty: Name erased from register.

(2) Dr. H.B.S. Found guilty of improper conduct in that he had signed an admission of guilt and had been convicted in the Magistrate's Court for failing to maintain a habit-forming drug register properly. Penalty: Cautioed.

(3) Dr. J.D.K. Found guilty of improper conduct in that he gave a false certificate concerning a post-mortem examination. Penalty: Cautioed.

Restoration. After debate, an application was refused for restoration to the medical register following removal from the register in 1950 after conviction for abortion.

DISPENSING BY MEDICAL PRACTITIONERS

In reporting the action it had taken in view of the threat to introduce into the Medical, Dental and Pharmacy Amendment Bill a clause amending section 73 of the principal Act so as to restrict medical practitioners' right to dispense, the Executive Committee submitted to the Council a memorandum on this subject which had been laid before the Minister of Health. The Minister had received a deputation from the Council, and it was concluded that he would probably not proceed with the suggested amendment to section 73. This has been confirmed by the fact that no such amendment is included in the amending Bill before Parliament in the present (1957) session. The Council passed a vote of thanks to the deputation.

Dispensing by Medical Superintendents of Hospitals. The O.F.S. Goldfields Division of the Medical Association had referred to the Council an advertisement by the O.F.S. Provincial Administration of posts of full-time medical Superintendents from which it appeared that the medical superintendent might be required to do all the dispensing in the hospital. The Council ruled that this procedure might be a contravention of section 73 of the Medical, Dental and Pharmacy Act, and was not in accord with the following resolution previously adopted by the Council, viz. 'That a medical practitioner should not place himself in economic competition with a chemist and druggist, but that the Council cannot agree to any encroachment on a medical practitioner's right to do his own dispensing . . .'

VARIOUS MATTERS

Representation of Profession on Council. A letter from the Minister of Health was reported in which he stated that he was unable to act in accordance with the Council's request that he should reconsider the refusal of his predecessor in office to take steps to appoint additional elected medical members to the Council.

Deaths under Anaesthetic. This subject was given consideration in previous years, as a result of which the Secretary for Health had addressed a minute to the Secretary for Justice recalling that it was agreed after the conference held in Cape Town in April 1954 that expert committees, comprising a surgeon, an anaesthetist, and a government pathologist or senior district surgeon should be appointed to assist inquest magistrates in investigating deaths occurring while the patient is under an anaesthetic; and giving the names submitted by the Medical Association of South Africa of persons who are prepared to serve on committees at Johannesburg, Pretoria, Bloemfontein, and the Cape Western Area. The minute was before the Council; the panel did not include a dentist, and the Council decided to suggest that a dentist should be added to the committees.

Intradermal Injections by Nurses. In response to an enquiry it was decided to inform the South African Nursing Council that the giving and reading of intradermal injections was a medical procedure and should only be done by a medical practitioner or under his authority and control.

Use of Local Anaesthetic in the Piercing of Ear Lobes. On consideration of an enquiry concerning the use by jewellers of a local anaesthetic in connection with an ear-piercing instrument

the Council expressed the opinion that, though it would be a matter for the courts to decide, the administration of any type of anaesthetic by an unqualified person would be a contravention of section 34 of the Medical, Dental and Pharmacy Act.

Proposed Appointment of Medical and Clinical Research Director by Pharmaceutical Firm. Consideration was given to a request, by Messrs. Scherag (Pty.) Ltd. for a ruling by the Council on their proposed employment of a registered medical practitioner in connection with Medical research which their company was developing in South Africa. His duties would include liaison with the medical profession and laboratories connected with universities, medical schools, etc. After considerable discussion it was decided to inform the company *inter alia* that the Council was not opposed in principle to the appointment of a Clinical and Research Director, on the distinct understanding that all the ethical rules relating to medical practitioners should apply.

Charging for Telephone Consultations. An enquiry was considered from the Federal Council of the Medical Association whether it was ethical to charge for telephone consultations. It was decided to reply that the Council was of the opinion that, in general, consultations by telephone should be discouraged; circumstances could, however, be visualized under which such consultations would be proper and under which the right of a medical practitioner to make a charge could not be disputed.

Use of Non-registrable Qualifications. On consideration of an enquiry from the University of Natal the Council ruled that there was no objection to non-registrable qualifications appearing in university calendars after the names of medical practitioners and dentists (full-time or part-time) on the staff of universities.

Buildings named 'Medical Centre'. Further consideration was given to a letter from Dr. R. Hofmeyr expressing ethical doubts on the occupation by practitioners of buildings with such names as 'Medical Centre'. The Council decided that, whereas it was sympathetic to many of the views expressed by Dr. Hofmeyr, 'it finds itself unable to recommend an amendment to ethical rule 21' (concerning the use of certain premises as consulting rooms) 'which will cover possible abuses which might arise'. It was also resolved to refer to the Medical Association of South Africa for consideration and comment the need or advisability of this rule being amended.

Radiographer in Charge of Radiologists' Practice. In reply to an enquiry from a radiologist it was decided to inform him that under no circumstances could he be permitted to leave his radiographer in charge of his practice during his absence on leave, seeing patients, making the requisite examinations, and continuing deep X-ray therapy already prescribed.

Technologists in Pathologists' Practice. A firm of pathologists intimated their desire to open a branch laboratory in a country town, stationing 2 trained technologists there to give a 24-hour service including simpler routine tests. On a fixed day each week one of the partners would attend for consultations and more involved tests, which they would bring back to headquarters for completion. It was decided to reply (1) that technologists can only function under personal and direct supervision of a medical practitioner and (2) that what was proposed could not be allowed.

Name and Speciality on Cheque Forms. An enquirer was to be informed that for a practitioner to print or type his name and speciality on his cheque forms was an inadvisable practice.

Nursing Home as Part on Physician's Practice. A specialist physician enquired whether he was entitled to equip and run a nursing home as part of his practice, and also whether there were any provisions in regard to the naming of the nursing home. The Council decided to reply that he cannot conduct a nursing home as part of his practice, but that Council in the past has not objected to medical practitioners having an interest in a nursing home run as an independent concern. He may not use any name which might tend to advertise him as a medical practitioner. Attention was drawn to ethical rule No. 21 (3).

'Bona fide Enquirer'. The Dental Association of South Africa, desiring to obtain from a benefit society details of the proposed contract concerning a recently advertised dental appointment, enquired whether their Association would be regarded as 'bona fide enquirers' in terms of ethical rule 19 (4) (b). The Council decided to reply that the matter is one for legal interpretation, but that the Council is of opinion that the term means dentists who contemplate applying for a professional post after knowing the details of the proposed contract.

MINISTER SURVEYS HEALTH OF THE UNION

TUBERCULOSIS, POLIOMYELITIS, MALARIA, BILHARZIA, DIPHTHERIA AND TYPHOID, MENTAL DISEASE

BY OUR PARLIAMENTARY CORRESPONDENT

As a result of measures taken by the Government it was anticipated that more than 15,000 beds for tuberculosis patients would be available throughout the Union in the immediate future, as compared with 6,000 beds two years ago, said the Minister of Health, Mr. J. H. Viljoen, when he moved his policy motion in the Senate on 21 March 1957.

The Minister said that by means of X-ray surveys and tuberculin testing in many parts of the Union, a very clear picture of the prevalence of pulmonary tuberculosis among all races had been obtained. From this it was apparent that the Union was faced with a problem, aggravated by ignorance and indifference among certain groups, of an infectious disease which had reached an incidence of up to 0.5% in Europeans and 1.2% in non-Europeans.

Mass Radiography

Outlining the action taken by the Department of Health to control tuberculosis, Mr. Viljoen said that, having gained experience in the use of minifilm (70 mm.) X-ray work in the early detection of the disease, his Department decided to apply this technique on a large scale. Consequently, 19 mobile units, additional to the 4 previously in use, were purchased last year. Owing to unforeseen circumstances, considerable delay occurred in putting these units into operation. This was partly due to the fact that on delivery it was found that modifications were necessary to adapt them to local conditions. The position was aggravated by the fact that this involved the procurement of special parts. The Minister added that local authorities having a population of 20,000 and more, were being encouraged to purchase their own 70 mm. X-ray machines.

Hospital Beds

'As far as the provision of treatment facilities is concerned, great progress has been made in recent years', said Mr. Viljoen. 'In addition to the expansion of facilities for the treatment of suitable cases on out-patient lines, steps have been taken by my Department to increase bed accommodation for tuberculosis patients. In this connection stress has been laid on the adaptation of existing redundant buildings, more particularly unoccupied military hutments, and leper and venereal-disease accommodation which has become available consequent upon the application of the latest methods of treatment of those diseases.'

'New buildings and extensions have also been approved at many municipal, divisional council and mission centres and the establishment of new SANTA settlements has been subsidized by my Department. In addition, the utilization of redundant mine compounds by mission groups and SANTA is encouraged.'

'It is anticipated that in consequence of these efforts a total of more than 15,000 beds for tuberculosis patients will be available throughout the Union in the immediate future. This represents a vast improvement when compared with the position obtaining a little more than 2 years ago when there were only about 6,000 tuberculosis beds available.'

'In view of the notable decrease in the incidence of the disease among Europeans, the stage has now been reached where the available bed accommodation for Europeans exceeds the demand. Redundant European wards are consequently being made available for use by non-Europeans in suitable cases.'

Out-patient Treatment

The Minister said that facilities for out-patient treatment of tuberculosis, too, had been developed in many parts of the country with a view to building up a network of treatment centres. At present some 40,000 tuberculosis cases were receiving out-patient treatment in the Union.

Nutrition. The Department of Health, cognizant of the valuable role which adequate nutrition played in the control of tuberculosis, accepted for purposes of part-refund to local authorities expenditure incurred in connection with supplementary food supplied to tuberculous patients treated on out-patient lines.

BCG Vaccination. The difficulties previously associated with BCG vaccination had recently been overcome by the freeze-

drying of this vaccine, and it was hoped that supplies would be available soon for issue to local authorities with approved controlled schemes.

POLIOMYELITIS

Dealing with poliomyelitis the Minister said that during the past year this disease had continued to give rise to considerable anxiety in the Union, where it had been very prevalent. During the year 1956, 2,918 cases were reported, of which 1,422 occurred in Europeans and 1,496 in non-Europeans. The disease was very widespread and the various provinces were more or less equally affected in proportion to their populations.

'One unusual and very disquieting feature of the disease during 1956 was the fact that it continued to be prevalent throughout the winter months', said Mr. Viljoen. 'The incidence increased further with the onset of summer, as of course is usual.'

After outlining the steps taken by the Department to meet the position and the reasons for the sudden shortage of poliomyelitis vaccine, the Minister stressed that the decision to import vaccine should in no way be interpreted as indicating that the vaccine produced in South Africa was in any way inferior to that produced elsewhere. As soon as the South African Poliomyelitis Research Foundation was again able to meet local demands, importation by the Government would be discontinued.

'Although experience seems to indicate that the poliomyelitis vaccine issued at present is of great value, research work with a view to the production of an even more effective vaccine is constantly being carried out', said Mr. Viljoen. 'These developments are being closely watched and if improvements in vaccine production are brought about, the Union will not lag behind.'

MALARIA

The Minister recalled that last year his predecessor, in reviewing his policy, stated that while malaria was well under control, sporadic outbreaks of the disease still occurred and that in view of these sporadic outbreaks and the fact that mosquitoes in other parts of the world had developed a resistance to DDT, a conference would be arranged in the Union, when the problem would be discussed by the Union's own experts in the field of malaria with experts from neighbouring territories and representatives of the World Health Organization.

'This conference took place in Pretoria in July last year and proved to be very successful from the point of view of interchange of scientific knowledge on the subject. The conference concluded that the eradication of malaria in Southern Africa was quite feasible, provided adequate control measures were carried out in each territory and effective interterritorial cooperation and coordination could be established.'

'The evolution of a suitable procedure whereby such co-operation and coordination can be attained is being considered by my Department.'

'It was further recommended that, in order to control malaria effectively and with a view to its ultimate eradication, the disease should be declared a notifiable one in terms of the Public Health Act. This recommendation has been given effect to and it is consequently now possible to have every case thoroughly investigated with a view to discovering the source of infection and to the protection of all exposed to the infection of malaria'.

BILHARZIA DISEASE

Mr. Viljoen said that the Department's efforts to control bilharzia had as yet not met with the same measure of success as in the case of malaria. Much still remained to be learned about the disease and the Council for Scientific and Industrial Research, in cooperation with the Department's Bilharzia Control Staff in the Northern Transvaal, was carrying out investigations in regard to methods best suited for controlling the disease.

In Natal an anti-bilharzia committee had been formed to investigate the incidence of the disease in that province.

An aspect of bilharzia control which was not being overlooked was the mass treatment of infected persons, and the feasibility of this was at present being investigated.

DIPHTHERIA AND TYPHOID FEVER

The Minister pointed out that so much attention had lately been focussed on tuberculosis and poliomyelitis that the prevalence of other preventable diseases were apt to be overlooked. Last year the incidence of poliomyelitis—2,918—was the highest recorded so far but according to the latest available statistics, no less than 3,342 cases of diphtheria and 4,230 of typhoid were reported in one year.

Although the number of deaths from typhoid had decreased in the past few years owing to recent advances in the treatment of the disease, there did not appear to have been an appreciable decline in its incidence during the past 10 years. The majority of cases occurred in rural areas and of the 4,230 cases reported in one year, over 57% were from rural areas.

'This is viewed with alarm, especially if regard is had to the fact that my Department has for many years been making supplies of vaccine against typhoid available to local authorities, free of charge. Without the wholehearted cooperation of the public, it will be impossible for my Department, in conjunction with local authorities, which are responsible for taking the necessary measures for the prevention of infectious disease in their areas, to effectively control the disease.'

MENTAL DISEASE

Mr. Viljoen said it was the policy of the Government to make every attempt to overcome the shortage of accommodation for

both mentally disordered and mentally defective patients by building new hospitals and providing additional accommodation at existing hospitals. A step in this direction was the appointment of an inter-departmental committee to investigate the requirements for additional accommodation in the Union. The committee had completed its investigations and its report was being awaited. That there must be a time lag before building can commence, is obvious, and in the meantime the position, which is grave, will deteriorate still further. Every effort, however, is being made to expedite the planning of several new projects.

'The planning of a new mental hospital for European patients which will be built in the Western Province is well advanced; so, too, are the plans for the expansion of the Sterkfontein Hospital at Krugersdorp and additional accommodation at the Valkenberg Hospital. These three projects will provide additional accommodation for 2,600 European patients and 500 non-European.

'In addition to the above an admission block for European male patients at Komani Hospital, Queenstown, and one at the Oranje Hospital, Bloemfontein, is being planned.

'The question of building a new hospital to accommodate 1,800 mentally disordered non-European patients in the Northern Transvaal has been considered by the Government. Steps are being taken to find a suitable site so that the planning of the hospital can be commenced without delay.'

The Mentally Retarded Child. In conclusion the Minister said that another problem which was also receiving the attention of his Department was the mentally retarded child who was not educable nor certifiable in terms of the Mental Disorders Act. This in itself was a vast problem, the solution of which demanded foresight and careful planning.

POLIOMYELITIS VACCINE

BY OUR PARLIAMENTARY CORRESPONDENT

The Poliomyelitis Research Foundation is at present busy with the manufacture of 600,000 doses of poliomyelitis vaccine and it is hoped that these will be ready for distribution in the near future, according to an announcement made by the Minister of Health, Mr. J. H. Viljoen, in the House of Assembly recently.

The Minister, who was dealing with various points raised during the discussion on the Health Vote in the committee stage of the Additional Estimates, said that initially fear had been created in regard to poliomyelitis vaccine as a result of statements made by certain doctors and the public was, to a great extent, hesitant about using the vaccine. At that stage, after repeated requests had been made to the public to apply for the vaccine, only 17,000 applications for inoculation had been received. The unfortunate incident in America, where a number of children had become the victims of vaccine which had not been tested properly, had also helped to create a strong prejudice in South Africa.

Nevertheless, the Poliomyelitis Research Foundation continued with the production of the vaccine and during December the Foundation was able to deliver 80,000 doses, after 20,000 doses had been thoroughly tested to ensure that it was safe for use by the general public.

'At that stage the Foundation informed me that it hoped to be able to meet the full demand in South Africa by March', said Mr. Viljoen. 'Unfortunately, the vaccine which had to be delivered in December/January could not pass the test, with a consequent delay in the delivery of the vaccine. I may add that on 7 March we were again able to release 80,000 doses because the Foundation had succeeded in overcoming the difficulty that was experienced and is again in full swing as far as production is concerned'.

Mr. Viljoen said some members had become excited about the fact that poliomyelitis vaccine was not imported from America in time, but it must be remembered that the vaccine was not something which could be bought over the counter. In December already two commercial firms were given licences to import poliomyelitis vaccine from America for the purpose of re-sale in the Union, but the American Government were not prepared to supply the vaccine for re-sale.

On 28 January he met a delegation from the Foundation in Cape Town, when they informed him of their difficulties. It appeared that something had gone wrong with the purifying process. Certain viruses had got through and contaminated the vaccine. On the same day a cable was sent to the South African Embassy in Washington to ascertain whether polio vaccine could not be supplied from the United States on an inter-governmental basis. Also on the same day the Union's embassy replied that this was not possible, but that it could only be obtained through ordinary commercial channels.

After stating the steps taken by the Government to hasten the delivery of the American vaccine through commercial channels, the Minister said that at this stage it was not possible to say when the vaccine would arrive. Everything was being done to obtain it as soon as possible and he had personally given instructions that the vaccine must be sent by air as soon as the necessary formalities were completed.

He denied that any import duties would be levied on the vaccine.

Dr. Henry Gluckman, a former Minister of Health, said that in the light of happenings within the past few months it was vital that there should be greater liaison, if not control, by the Ministry of Health over the organization which was today the only one in South Africa producing poliomyelitis vaccine.

'That, to my mind, is a matter of the greatest importance and it should receive the attention of the Government', he said. 'We must remember that originally the Foundation was established by a generous public which made funds available for the establishment of an organization primarily for research, and it should be the aim to allow the Foundation to continue to make that its primary object. It would be a pity if this fine institution under an expert director—an outstanding scientist—should utilize their time in directing mass production of vaccine'.

The Minister said that as a result of talks he had with a deputation from the Foundation, plans had been made to meet the suggestions put forward by Dr. Gluckman. The delegation had

also informed him that, though the equipment which had been used initially had been satisfactory up to a point, certain defects, as regards both the production and testing of the vaccine, had come to light which had necessitated a complete change-over. Among other matters it was discovered that it was dangerous to produce and test the vaccine in the same laboratory.

QUESTIONS ANSWERED

POLIOMYELITIS VACCINATION

R. TURNER

*Senior Government Pathologist, Cape Town, and Adviser in Pathology to the Union Health Department.
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QUESTION I. *Is poliomyelitis vaccine 100% safe?*

No vaccine is or can be absolutely safe but present poliomyelitis vaccine is safe beyond all reasonable fear of danger and is safer than most other vaccines.

Every batch of vaccine manufactured in the USA or South Africa is required to pass very stringent safety-tests before issue and the tests prescribed in South Africa are exactly the same as those prescribed in the USA.

Before authority is given by the Union Health Department for the release of any batch of vaccine by the South African Poliomyelitis Research Laboratory, the protocols of the prescribed tests are mostly carefully scrutinized by an Expert Advisory Committee which has been appointed by the Minister for Health for this purpose.

According to an authoritative American statistical analysis of the present safety-tests, the chances of a minimal infective dose of 5 live virus particles being present in one litre (1,000 doses) of finished vaccine which has successfully passed the tests is less than 1 in 100,000. The theoretical chance of a dose of vaccine causing an infection is, therefore, 1 in millions. That this claim is soundly based is confirmed by the fact that, since these safety tests have been introduced, many millions of children in the USA and other countries have been inoculated with the vaccine without one proven case of paralytic poliomyelitis due to the vaccine having been reported.

The South African vaccine, moreover, is not made with the notorious virulent Mahoney strain but with avirulent Brunender strain for its type-I component. Therefore should the extremely rare chance of an infective dose of live virus occur in an ampoule of South African vaccine, the chance of its inoculation causing a paralytic attack is even more remote.

The dangers (which were once feared) that sensitization of the patient to the Rh factor or allergic complications (e.g. nephritis) might occur owing to traces of monkey protein in the vaccine from the medium in which the virus was grown, now appear to have been safely negated and, in this regard, it is worth noting that all foreign protein is precipitated out of the South African vaccine by treatment with chloroform.

QUESTION II. *Should I have my child inoculated?*

Yes, unless it has been shown by serological tests that the child is immune to all three types of poliomyelitis virus.

Although inoculation with poliomyelitis vaccine does not prevent infection with the virus, there is convincing evidence furnished by the famous American field trials and confirmed by subsequent experience that the vaccine is about 60% or more effective in preventing paralytic complications. There is also some evidence to suggest that, when, despite the previous prophylactic use of the vaccine, paralysis does occur, the paralysis is less severe than it would have been if no inoculations had been given.

Whether a child has acquired a natural immunity to any or all three types of virus can be readily ascertained by testing a sample of its blood for specific antibodies. The South African Poliomyelitis Research Laboratories (P.O. Box 1038, Johannesburg) undertakes these tests at the charge of £3 3s. 0d. per specimen. A sample of about 3 c.c. of whole blood, as for the Wassermann test, should be sent to the laboratory. The test is also of value

In reply to a question raised by Col. O. L. Shearer (Pietermaritzburg City) the Minister said it was considered that the period between the first and second inoculation should not be longer than 4-6 weeks and between the second and third inoculations, 6 months. It could be shorter without causing any ill effects.

in ascertaining whether or not a child has developed an immune response as a result of inoculations.

QUESTION III. *Are the reported cases of poliomyelitis contracted after inoculation coincidental—was the disease incubating at the time of inoculation or is there any chance of it being due to the vaccine?*

The American authorities appear to be satisfied that, since the introduction of the present safety tests, no cases of paralytic poliomyelitis have been caused by the use of their vaccine and that all cases of paralytic poliomyelitis which have shortly followed upon the administration of American vaccine have been purely coincidental. As the South African vaccine, as previously indicated, is required to pass exactly the same safety tests as the American, there is no reason whatever to believe that the South African vaccine is any more capable of causing paralytic poliomyelitis than the American.

All cases of poliomyelitis occurring in the Union of South Africa are reported to the Union Health Department which, since the introduction of the vaccine, has by routine made inquiry whether any of the cases have received previous inoculations. The records of all patients who have contracted poliomyelitis within 30 days of receiving an inoculation are carefully studied by the Expert Advisory Committee. Though there have been a number of such cases, the committee has been unanimously satisfied to date that all of them have been coincidental and were not caused by the vaccine.

QUESTION IV. *Is it preferable to use South African or the Salk (American) vaccine?*

It appears to be immaterial whether South African or American vaccine is used.

The question of the safety of the vaccine has already been dealt with and there remains only the question of its efficacy. The efficacy of a vaccine can only be properly assessed by comparing the incidence of the disease in a large group of inoculated persons kept under proper and prolonged observation with a large group of uninoculated persons who are kept under similar observation and who are at equal risk of contracting the disease. This was done for poliomyelitis vaccine in the American field trials but it has been quite impossible to conduct a similar survey in South Africa.

Nevertheless, though it has not been possible to measure the efficacy of the South African vaccine, there are many good reasons to believe that its efficacy is similar to that of the American. These reasons are as follows:

1. The South African vaccine is prepared by essentially the same method as the American, the only significant difference being that the Brunender instead of the Mahoney strain is used for the type-I component.

2. Both vaccines are required to pass suitable animal experimental tests for potency (antigenicity) before release for issue.

3. A recent comparative assay for potency between South African vaccine and a sample of American vaccine gave similar results, though the type-I antibody response (which is the most important response) was somewhat better with the South African than the American. It would not, however, be fair to generalise on the results of a single random assay of this nature.

4. Surveys of limited extent have been carried out on samples of blood taken from children before and some time after inoculation with South African vaccine and these surveys have proved that the South African vaccine provokes an antibody response similar to that of American vaccine and indicative of immunity to all three types of virus.

Over 300,000 doses of South African vaccine have now been issued and the greater part of this vaccine has been used to give first inoculations to children of 6 years of age and under. As from March 1956 to date, 117 cases of poliomyelitis have been reported in children who have received one inoculation of the vaccine and 11 cases in children who have received 2 inoculations. Some of these cases did not develop paralysis but others did and 6 proved fatal. Though there are at present very few children in South Africa who have been inoculated with American vaccine, one of the reported paralytic cases was in a child who, 3 months previously, had received its second dose of American Salk vaccine.

These failures with vaccine prophylaxis were not unexpected, for two main reasons, viz.:

(a) The American field trials and subsequent experience has shown that a failure rate of about 40% is to be expected, and

(b) the group of the children affected, because of age, was the group at maximum risk, in whom most cases were to be expected.

Thus, though the significance of these figures cannot be assessed because of lack of information on which to decide the risks, they by no manner of means indicate that the South African vaccine is not as effective as the American, and it would be quite unfair to attempt to draw this conclusion.

QUESTION V. *Penicillin sensitization seems to be increasingly prevalent. As there is penicillin present in the South African vaccine in traces, is it safe to use on a child who has already*

developed facial oedema following a penicillin injection? If not what safeguards are suggested?

In order to obviate bacterial contamination, antibiotics (e.g. penicillin and streptomycin) are added to the culture medium for the monkey renal cells in which the virus for the vaccine is grown. This practice, as far as I know, is adopted by all manufacturers of poliomyelitis vaccine—American and British as well as South African. The amount of antibiotic added is, however, very small and it is claimed that it is destroyed in the processing of the vaccine. Thus no traces of penicillin has been found by the most sensitive tests in the finished vaccine. There thus would appear to be little danger of a serious penicillin reaction following upon the use of South African or other poliomyelitis vaccine, and Dr. J. P. de Villiers, M.O.H. of the Cape Divisional Council has informed me that no poliomyelitis reactions were reported amongst the 15,000 children who recently received poliomyelitis vaccine inoculations in his area. The possibility of such a reaction followed the inoculation of the vaccine into a sensitized child cannot be entirely excluded.

Therefore, in the case of a child who is known to be sensitive to penicillin, I would suggest that in the first instance a sample of its blood be sent for testing for its antibody content. If the test shows the presence of antibodies to all three viruses, vaccination may be deemed to be unnecessary. If, however, the child shows an absence of immune bodies, especially to type -1 virus, I would advise vaccination but would suggest that a skin test be first carried out by injecting 0.2 c.c. of the vaccine intradermally. If no local reaction develops within 30 minutes, I would then give the remainder of the dose subcutaneously but would be prepared to treat promptly any reaction which might follow, with adrenaline or with suitable antihistaminics.

If the child is found sensitive by skin tests to one make of vaccine, I would try such tests with other makes, if available, in the hope of finding one to which it is not sensitive.

DIE OPENING VAN DIE GEBOU VIR ANATOMIE EN FISIOLOGIE OP STELLENBOSCH

PROF. J. N. DE VILLIERS

Die D. F. Malan-Gebou vir Anatomie en Fisiologie van die Geneeskundige Fakulteit van die Universiteit van Stellenbosch, is op 27 Februarie amptelik geopen met 'n silwer sleutel deur Sy Hoogedele die Eerste Minister, Adv. J. G. Strijdom. Onder die gaste teenwoordig was ook dr. D. F. Malan, min. A. J. R. van

Rhyn, min. J. H. Viljoen, mnr. P. J. Olivier, Administrateur van Kaapland en mnr. D. T. du P. Viljoen, Administrateur van Suid-Wes.

Ds. J. S. Gericke, Vise-Kanselier van die Universiteit, het die verrigtinge met skriflesing en gebed geopen. Sy Hoogedele die



D. F. Malan-Gebou vir Anatomie en Fisiologie, Stellenbosch

Foto: Cape Times

Eerste Minister, Adv. J. G. Strijdom, het daarna in 'n toespraak hulde gebring aan almal wat tot die oprigting van die gebou bygedra het, en in besonder, dr. Wilcox en professor Thom in hul hoedanigheid as Rektor van die Universiteit. Hy het ook verwys na die algemene byval wat die benaming—die D. F. Malan-Gebou—gevind het. Verder het hy die hoop uitgespreek dat die nuwe Geneeskundige Fakulteit roem sal verwerf in die wetenskap van voorbehoedende geneeskunde wat nie net tot eer van die Universiteit sal strek nie, maar ook die mensdom as geheel sal baat.

Die studente is aangemaan om, as wetenskaplikes in die diens van hul volk, ook van hul Universiteitsopleiding gebruik te maak vir die kweking van 'n godsdienssin, moraliteit en intellek.

In 'n kort toespraak daarna, het dr. D. F. Malan gesê dat die uitbreiding van die Universiteit in die geneeskundige rigting 'n vervollediging van die Universiteit teweeggebring het. Hy het die

hoop uitgespreek dat hierdie verdere groei van die Universiteit in diens van ons land en volk sou staan.

Prof. H. B. Thom het die verrigtinge afgesluit deur sekere besonderhede in verband met die gebou te verstrek. Die gebou self het £120,000 gekos en die toerusting £30,000. Die Universiteit het helfte van die bedrag bygedra en die Regering die ander helfte. 'n Gedeelte van die Mediese Fonds, wat oor 10 jaar deur die Universiteit opgebou is, is daarvoor gebruik. Mnr. J. B. Collins, argitek van die gebou, het uitgebreide reise deur Europa en die Verenigde State onderneem en navorsing gedoen om die gebou, en veral die toerusting, so modern en doeltreffend moontlik te maak. In die Anatomie-afdeling is die ontleedtafels en fasiliteite vir bewaring van die lyke, besonder modern. Die 75 lokale in die gebou is daarna oop verklaar vir besigtiging deur die besoekers.

Die verrigtinge is met 'n onthaal vir al die besoekers by die manskoshuis, Simonsberg, afgesluit.

OBITUARY

DR. W. C. COMRIE-SHARP, DR. GORDON J. KEY

We regret to announce the death of Dr. W. C. Comrie-Sharp, retired Gynaecologist, which occurred in Groote Schuur Hospital, Cape Town, on 23 March 1957. He was 77.

We regret to announce the death, which occurred on 24 March 1957, of Dr. Gordon J. Key, who was for 18 years Superintendent

at Valkenberg Mental Hospital till his retirement in 1955. He was a former head of the Department of Psychiatry at the University of Cape Town.

In memoriam notices will appear in later issues of the *Journal*.

IN MEMORIAM

J. I. LIPSCHITZ, M.B., CH.B., D.P.H. (CAPE TOWN), M.R.C.P. (EDIN.)

Dr. F. Krone of Cape Town, writes: It was with very great regret indeed that I heard of the sudden death of Dr. J. I. Lipschitz on 11 March. He appeared to have recovered so well after his severe attack of coronary thrombosis, some 7 weeks ago, and when I



J. I. Lipschitz

visited him a few weeks ago, his one thought was to get back to his work as soon as possible. He intended returning to his rooms last week, but it was not to be.

As Dr. Lipschitz's rooms adjoin mine, he often attended to my dermatological practice when I was away; so I got to know him very well indeed, and for long periods I saw him practically daily, and was thus well acquainted with his person and the quality of his work—so much so that when I had to retire from practice 2½ years ago owing to ill health, I could think of nobody better equipped in every way to take over my practice, in which I had worked hard for nearly 30 years, than Dr. Lipschitz—I felt my practice would be in good hands and that is the biggest compliment that I could pay him.

Dr. Lipschitz was quiet, unassuming and friendly, always obliging, very conscientious, honest in every way, and kind to his patients, whom he always inspired with confidence and hope. I had a high regard for Dr. Lipschitz as a dermatologist. He was a good diagnostician, read a great deal, and was always up

to date with the latest theories and methods of treatment. He spared no trouble to do the best for his patients. It was my impression that he seldom volunteered advice unless he was asked for it, and then one could listen to him. I often consulted Dr. Lipschitz, for I valued his opinion greatly.

As a sportsman he was a keen cricketer at Hermanus, where he practised for many years. He was also a keen and good bowler and did a tremendous amount of work for the Stadium Bowling Club, of which he was a past president. It seems a great pity that, after qualifying himself for many years as a dermatologist, first under the late Dr. H. M. Bosman at Wynberg hospital after the last war and then overseas for some years, he should have been allowed to practice as a dermatologist for only about 7 years. His colleagues will miss him greatly.

I shall always cherish very happy memories of my association with the late Dr. Lipschitz and feel sure that my fellow dermatologists share this opinion of their departed colleague.

Dr. S. Stein of Cape Town writes: The passing of the late Dr. J. I. Lipschitz on 11 March came as a great shock to his many friends.

He was educated at the South African College School and the University of Cape Town, where he graduated B.A. and M.B., Ch.B. after a brilliant academic career. Thereafter he practised for more than 20 years in the Stanford, Gansbaai and Hermanus districts. Here, as wherever he went, he was a much loved person. He was interested in the welfare and activities of the people around him and became a recognized leader of the community.

When war broke out he volunteered for service with the S.A.M.C. and served in North Africa, first with the 5th Field Regiment of the S.A. Artillery and then with 106 S.A. General Hospital. On his return to the Union, he ran the skin disease ward at the Wynberg Military Hospital. On demobilization Joe returned to the University and obtained the Cape Town D.P.H., after which he left for Britain where he studied dermatology in London, Leeds and Edinburgh. He was admitted M.R.C.P. of Edinburgh, whereupon he returned to Cape Town, to succeed to the dermatological practice of the late Dr. Moores Bosman. On the retirement

from active practice of Dr. Krone, he took over this practice also. He was on the staffs of the Groote Schuur and Woodstock Hospitals.

Sport was a great interest in his life. In his younger days he excelled at cricket, getting his blue at U.C.T. and later captaining the Hermanus team. He helped to establish the Stadium Bowling Club, where he was President for a while and at one time Singles Champion. The Stadium honoured him for his work by making

him an honorary life member, and also by nominating him as their delegate to the Western Province Bowling Association Council.

So much for the bare details of his career. We should here like to express our deepest sympathy to his mother, brothers and sisters in the loss of so loved a man. The warm humanity, sympathy, restraint and humour which were features of his personality will be sadly missed by his patients, colleagues and friends.

PASSING EVENTS: IN DIE VERBYGAAN

The next meeting of the Research Forum, University of Cape Town, will be held at 12 noon on Wednesday, 3 April 1957 in the A-Floor Lecture Theatre, Groote Schuur Hospital, Cape Town. Speaker: Dr. E. Davidson. Subject: The Buffly Layer.

* * *

Dr. I. Grayce of Cape Town will be leaving for the USA on 29 March. While there, he has arranged to work at various hospitals, particularly in Boston and New York, and to attend the annual meeting of the American Medical Association at Atlantic City. After revisiting hospitals in England, he expects to be back in South Africa about the middle of June.

* * *

The Jooste Cup Golf Competition. This competition, which is organized by the East Rand Branch of the Medical Association of South Africa and will be held this year at State Mines Golf Club, Brakpan, on Sunday, 14 April, is open to all members of the Association. Entries may be submitted to the convener, Dr. William Sacks, at P.O. Box 813, Springs, or by telephone at 56-5371 (rooms) or 56-1138 (residence).

* * *

Union Department of Health Bulletin. Report for the 7 days ended 7 March 1957.

*Plague, Smallpox, Typhus Fever: Nil.
Epidemic Diseases in Other Countries.*

Plague: Nil.

Cholera in Calcutta.

Smallpox in Kabul, Ahmedabad, Allahabad, Bombay, Calcutta, Cochin, Madras, Nagapattinam, Pondicherry, Tiruchirappalli, Visakhapatnam (India); Djakarta (Indonesia); Baghdad, Basra, Mosul (Iraq); Kuwait (Kuwait); Saigon-Cholon (Viêt-Nam); Nairobi (Kenya).

Typhus Fever in Cairo, Damietta (Egypt).

NEW PREPARATIONS AND APPLIANCES : NUWE PREPARATE EN TOESTELLE

Draeger Volumeter. Messrs. Safety and Medical Equipment Co. (Pty.) Ltd., announce the introduction of the Draeger Volumeter for continuous control of the respiratory volume during anaesthesia and artificial respiration and during tests of the pulmonary function.



The apparatus is of special gas-tight construction for measuring the entire quantity of exhaled air. It embodies a clearly arranged dial for reading of values of exceptionally low respiratory resistances, the Volumeter, obviating additional efforts by the patient.

The Volumeter, when used in anaesthesia, is installed between the absorber and the inhalation valve piece. When used during artificial respiration it is connected to the face mask, the mouth-piece or the tracheotomy cannula. With 'Polimat' ventilation it is attached directly to the apparatus.

The Volumeter can also be used in tests of pulmonary function; it is then connected to the face-mask or mouth-piece.

The complete unit is supplied in a case containing masks, mouthpieces, connecting tubes and cones.

Sole distributors: Safety and Medical Equipment Co. (Pty.) Ltd., Johannesburg, Durban, Port Elizabeth and Cape Town.

REVIEWS OF BOOKS : BOEKRESENSIES

TUBERCULOSIS OF THE LUNGS

Die Lungentuberkulose. Diagnose und Therapie. 3 Auflage. Von Prof. Dr. P.-G. Schmidt. XII + 384 Seiten. 234 Teils Mehrfarbige Abbildungen. DM 58.-. Stuttgart: Georg Thieme Verlag. 1956.

Inhaltsverzeichnis: Vorwort. I. Geschichte der Tuberkulose. II. Der Erreger der Tuberkulose. III. Infektionswege. IV. Pathologische Anatomie. V. Allergie und Immunität. VI. Verlauf und Einteilung der Tuberkulose. VII. Vererbung, Exposition, Disposition und Konstitution. VIII. Anamnese. IX. Krankheitszeichen. X. Untersuchungsmethoden. XI. Das klinische Krankheitsbild. XII. Die Erkrankung der Pleura. XIII. Extrapulmonale Tuberkulosen. XVI. Therapie der Lungentuberkulose. XV. Die Prognose der Lungentuberkulose und die Erfolge ihrer operativen Behandlung. XVI. Die Bekämpfung der Tuberkulose durch soziale Massnahmen. Begutachtung. Literaturverzeichnis. Sachverzeichnis.

The great advance in our outlook on tuberculosis since 1947, when the 2nd edition of Prof. Schmidt's book on pulmonary tuberculosis was published, has necessitated a new edition which has in great part been rewritten. It retains the conciseness and

the compact style of the original: 160 pages of letterpress have been added and fresh statistical tables supplied.

The appeal of this work is largely to the specialist; it is not a text-book in the ordinary sense meant for the student or general practitioner. Written in a condensed style it seeks to cover every aspect of the field, and techniques and tests are briefly mentioned on the assumption that the reader is thoroughly familiar with them.

Adhering closely to its title, the work devotes only 11 pages to extra-pulmonary tuberculosis; to meningitis only one.

The opening 7 chapters (80 pages) give an admirable account, though highly condensed, of the history, cause and pathology in all its phases of tuberculosis, again so compressed that there is hardly a redundant word.

The best sections are those dealing with clinical pathology and treatment, which aspects are discussed as between *cognoscenti* and with a minimum of elaboration or waste of space.

The author holds sane and conservative views in the matter of treatment—a quality which is distinctly rare in writers on tuber-

culosis. He balances the numerous surgical and medical therapeutic measures with a familiarity based on his wide personal experience.

Altogether this is a worth-while compendium of precise up-to-date information which every specialist claiming affinity with the Continental schools should have on his shelves.

The customarily fine printing and production of the firm of George Thieme is well in evidence, and the use of paper of the finest quality has made really good reproduction of many radiographs possible.

D.P.M.

MENTAL DEFICIENCY

Tredgold's Text-book of Mental Deficiency. Ninth Edition. By R. F. Tredgold M.D., D.P.M. and K. Soddy, M.D., D.P.M. Pp. xv + 480. 31 Plates. 4 Figures. 4 Tables. 40s. 0d. net. London: Baillière, Tindall and Cox Ltd. 1956.

Contents: A Personal Note. Preface to the Ninth Edition. Section A. General I. The Concept and Nature of Mental Deficiency. II. Incidence. Section B. Causal. III. Aetiology and Classification. IV. The Grades of Defect. V. The Normal Mental Structure. VI. The Defective Mind. VII. Morbid Anatomy and Histology. VIII. The Physical Associations of Amentia. Section C. Clinical. IX. Simple Amentia. X. Complications of Simple Amentia. XI. Disorders of Relationship. XII. Psychological Instability and Moral Deficiency. XIII. Genetic Amentia. XIV. Secondary Amentia: Derivative Group. XV. Secondary Amentia: Traumatic and Infective Group. XVI. Educational Defect and Disability. XVII. The Family and the Defective Child. Section D. Social and Practical. XVIII. Sociology. The Ament and the Community. XIX. Clinical Examination. XX. Diagnosis, Disposal and Prognosis. XXI. Treatment and Training. Appendixes. I. Table of Normal Developmental Data. II. Idiots Savants. III. Developmental Anomalies. IV. Forms of Care, Supervision and Control. V. Authorities, their Powers and Duties. Bibliography. Index.

Tredgold's *Mental Deficiency* is so well known as an authoritative work as to not need any introduction to a medical public. This 9th edition is the first to be published since the death of the original author, and it is fitting that the revision should be undertaken by his son, who cooperated in the preparation of the 8th edition.

As in all branches of medicine, great advances have been made in the understanding of mental deficiency and the authors have sought to bring the book up to date in the light of present knowledge. They have undertaken the complete re-writing of the chapters on the normal and the defective mind in an effort to relate current developments in dynamic psychology to amentia. A series of clinical descriptions based on a general hypothesis of orientation in environmental relationships has been included, with a classification based on this system of theoretical psychopathology. A chapter on the defective's relations with his family has been included and an attempt has been made to include the results of current research into the aetiology and cause of amentia.

The chapter on the legal aspects of mental deficiency has been omitted as also the detailed descriptions of intelligence-testing and methods of case-taking.

There is little doubt that this work will remain a standard text-book on the subject of mental deficiency for a long time.

A.T.

BRITISH ENCYCLOPAEDIA OF MEDICAL PRACTICE

The British Encyclopaedia of Medical Practice. Including Surgery, Obstetrics, Gynaecology and other Special Subjects. Medical Progress 1956. Editor in Chief Sir Henry Cohen, M.D., D.Sc., LL.D., F.R.C.P., F.F.R. Pp. xiv + 364 + (14). London: Butterworth & Co. (Publishers) Ltd. South African Office: Butterworth & Co. (Africa) Ltd., P.O. Box 792, Durban. 1956.

Contents: Part I—Critical Surveys. Medicine. Surgery. Obstetrics and Gynaecology. Blood Diseases. Chemical Pathology. Diseases of the Prostate Gland and Bladder. Geriatrics. Medicine and the Law. Mental Diseases. Nephritis and Nephrosis. Orthopaedic Surgery. Plastic Surgery. Public Health. Radioactive Isotopes. Radiology of the Chest. Part II—Drugs. Recent Developments in Pharmacology and Therapeutics. Part III—Abstracts. Abdominal Emergencies—Vulva and Vagina Diseases. Index.

Since the publication of the last volume, the *British Encyclopaedia of Medical Practice* has lost its editor, Lord Horder. Lord Cohen has succeeded him in that position.

The form of *Medical Progress* remains unchanged. There are the three sections, Critical Reviews, Drugs, and Abstracts. Critical Reviews and Abstracts deal with medicine, obstetrics and gynaecology, public health, etc. Subjects dealt with include the newer cortisones, the newer insulins (but not the medicaments for the

oral treatment of diabetes), polio vaccines, hormonal and glandular operative treatment of carcinoma of the breast, hypo- and aglobulinaemias, afibrinogenaemia, aldosterone, etc.

The seriousness of tuberculosis under the age of 20 months is stressed. 155 out of 174 such cases were traced to human sources. BCG is discussed. In connection with antibiotics Jawetz (1954) reckons that these drugs are misused to the extent of 95%! The dangers of antibiotics are emphasized. Prediabetes is not mentioned—only manifest diabetes in pregnancy. Low-fat diet is recommended in infectious hepatitis. Most observers hold that this restriction is valid only in the early stage of nausea. In the progress note on fibrocystic disease of the pancreas no mention is made of the excessive loss of salt in the sweat of such cases, but in the 3rd section we have an abstract of a paper by St. Agnese himself on the subject.

Furadantin needs a place in progress notes. The importance of anoxia in the causation of cerebral birth-palsies is being stressed more and more in the literature and to a lesser extent actual birth-trauma.

The newer insulins are discussed, including the oral remedies for diabetes. Polio vaccines are dealt with. Dangers of oxygen therapy in emphysema, the value of electromyography in assessing prognosis in Bell's palsy, the treatment of breast cancer with hormones or resections of glands, amongst other subjects, are given due prominence.

F.F.

DERMATOLOGY AND VENEREAL DISEASES

Lehrbuch der Haut- und Geschlechtskrankheiten. Seventh Edition. By Dr. Walther Schönfeld. Pp. XVI + 513. 315 Illustrations. DM 445. Stuttgart: Georg Thieme Verlag. 1956.

Contents: Hautkrankheiten. A. Hautkrankheiten mit vorwiegend unklarer Ursache geordnet nach ihrem Aussehen. I. Krankheiten ohne primäre Erscheinungen an der Haut. Pruritus (Jucken). II. Fleckenbildende Krankheiten. III. Erythematös-squamöse Hautkrankheiten. IV. Papulöse Hautkrankheiten. V. Urtikarielle Hautkrankheiten. VI. Blasenbildende Hautkrankheiten. VII. Pustulöse Dermatosen. VIII. Atrophien und Hypertrophien vorzugsweise des Korioms. IX. Wuchernde und hyperkeratotische Hautkrankheiten. X. Gruppe des Ekzems. B. Hautkrankheiten mit bekannten Erregern. I. Tierische Parasiten. II. Pilzkrankheiten der Haut (Dermatomykosen). III. Durch Eitererreger bedingte Hautkrankheiten. IV. Durch Protozoen bedingte exotische Erkrankungen. V. Chronische bazilläre Erkrankungen. VI. Viruskrankheiten in der Dermatologie. C. Hautkrankheiten geordnet nach ihrem Wesen. I. Mechanische, chemische, thermische, aktinische Schädigungen einer normalen Haut. II. Exogene und endogene Schädigungen einer von vornherein überempfindlichen oder erst allmählich überempfindlich gewordenen Haut (Allergodermien). III. Hauterscheinungen bei Störungen des Blutes, des Stoffwechsels und der inneren Sekretion: Hinweis durch Hautkrankheiten auf innere Leiden. IV. Die Avitaminosen und Hypovitaminosen der Haut. V. Gewisse Erkrankungen des retikulären Gewebes mit Beteiligung der Haut (Retikulosen). VI. Erbbedingte Hautkrankheiten. VII. Geschwülste. D. Hautkrankheiten geordnet nach ihrem Sitz. I. An den Anhangsbildern der Epidermis. II. An Hautbezirken mit gewissen anatomischen, physiologischen und funktionellen Besonderheiten. E. Grundzüge der Behandlung. I. Allgemeinbehandlung. II. Heilmittel und ihre Anwendungsformen bei äusserer Behandlung. III. Physikalische Behandlung. *Geschlechtskrankheiten.* Die Syphilis. A. Übertragung der Syphilis. B. Die allereine Erkennung der Syphilis. C. Der allgemeine Verlauf der erworbenen Syphilis. D. Wesen und Verlauf der Frühsyphilis. E. Wesen und Verlauf der Spätsyphilis. F. Erkennung und Untersuchung der Syphilis, die dabei häufiger vorkommenden Fehler und ihre Vermeidung. G. Voraussage der Syphilis. H. Behandlung der Syphilis. J. Feststellung der Heilung und Heiratsverlaubbis. K. Die angeborene Syphilis, Behandlung und Verhütung. *Der Tripper (Gonorrhoe).* A. Übertragung. B. Allgemeine Erkennung. C. Der Tripper des Mannes. D. Der Tripper des Weibes. E. Der Tripper der kleinen Mädchen (Vulvovaginitis gonorrhoeica infantum). F. Der Mastdarm-triPPER. G. Der Tripper der Augenbindehaut. H. Die Allgemeinerkrankungen beim Tripper. *Die nichtgonorrhoeischen Harnwöhrenentzündungen und ihre Komplikationen.* *Der weiche Schanker (Ulcus molle).* Venerisches Geschwür. *Lymphopathia venerea* (Lymphomatosis inguinalis suppurativa subcutanea, Lymphogranulomatosis inguinalis, Nicolas-Favresche Krankheit, Poradenitis inguinalis, Vierte Geschlechtskrankheit, Lymphogranuloma venereum der Amerikaner.) *Das venerische Granulom (Granuloma venereum, Granuloma inguinale der Amerikaner)* Verhütung und Bekämpfung der Geschlechtskrankheiten. Die Untersuchung auf männliche Zeugungsfähigkeit. Namenverzeichnis. Sachverzeichnis.

With this volume Professor Schönfeld, of the University of Heidelberg, presents to his readers a concise, yet comprehensive, text-book on skins and venereal diseases which must be in great demand amongst German-speaking students.

In the 351 pages devoted to Dermatology in this 500-page book the author purveys a great amount of information. A very clear description is given of each skin condition considered. Nor are the less common dermatoses overlooked; for instance, pseudo-xanthoma elasticum and pinta, the treponemal disease of South America, are succinctly though adequately described. Rarer skin defects, such as cutis laxa and dermatochalasis receive brief mention.

To illustrate his text the author uses an abundance of photographs in black-and-white which clearly reveal the characteristic clinical and morphological peculiarities of the subject under discussion. The histology is described (without photomicrographs) whenever it departs from the standard pathological skin changes, which are set forth in a special chapter; but it has not the same prominence that is found in an English text-book.

Therapy is discussed in a special section. The field is well covered: diet, climate, fluid intake, the various drugs and antibiotics are all dealt with in turn. Physical methods of treatment, including the application of a plastic mass containing radio-active cobalt, are detailed, and the author stresses his viewpoint that these measures should be employed only by the specialist in this work. There are 45 numbered recipes of lotions, pigments, pastes and ointments which are referred to in the text by their numbers; as a consequence the pages are not cluttered up with a discouraging array of alternative prescriptions.

In less than 150 pages the venereal diseases get more detailed and informative recognition than is usual at the present day. No important development in this rapidly dwindling speciality is omitted. Many will feel that the detailed instructions on inunction with mercury as well as the paragraphs dealing with bismuth and arsenic could well have been left out. Their inclusion betrays the traditional reluctance of physicians on the continent of Europe to discard these well-tried remedies. Most readers, too, will probably consider the course of 10-12 injections of one million units of penicillin at 2-day intervals, advocated for early syphilis, excessive in comparison with, say, American standards. In certain circumstances, which are detailed by the author, repeated courses of penicillin plus bismuth are given. The reader will learn, not without surprise, that congenital syphilis in the newborn is treated by injecting a solution of penicillin, 50,000 units to the c.c., into the pharynx, whence it is swallowed!

There is an author index in addition to the usual subject index. The reader has to learn to find his way in the latter; sarcoidosis, for instance, is not listed under the letter S but under M as Morbus Boeck. Otherwise it is complete and helpful.

The physical attributes of this handy volume—format, type, binding—are in keeping with the usual high standards shown by this firm's publications. Certainly, the undergraduate who has studied his dermatology from this book is well equipped, not only to face the problems that will confront him in his daily practice, but to resolve them.

C.K.O'M.

WHITLA'S DICTIONARY OF MEDICAL TREATMENT

Whitla's Dictionary of Medical Treatment. Ninth Edition. By R. S. Allison, V.R.D., M.D., F.R.C.P., D.P.M. and T. H. Crozier, M.D., B.Sc., F.R.C.P., and 26 Contributors. Pp. xiv + 854. 52s. 6d. net. London: Baillière, Tindall and Cox Ltd. 1957.

The present edition, as the authors state in their preface, makes a distinct departure in that the scope of this old friend is now confined to *medical* therapeutics. As before, the main clinical, etiological and pathological features of the conditions to be treated are described. But now surgical, gynaecological, E.N.T., aspects (etc.) have been omitted. With the enormous strides made in therapeutics in recent times—vitamins, hormones, antibiotics, synthetic preparations etc.—this restriction in compass has become inevitable if the book is to retain manageable proportions.

The alphabetical arrangements of the subjects has been retained. The useful 'list of contents' helps to make consultation rapid and easy.

The book is sound from beginning to end. With so many

contributors participating it is a particularly praiseworthy achievement to have avoided fads and fancies; only well-tried old and promising new methods of treatment are included.

The reviewer has no substantial criticism to offer. The following are a few suggestions. Under the heading 'Headache' no mention is made of migraine, which has a chapter to itself, many pages further on. A reference to it would be useful. Likewise, under herpetic stomatitis no mention is made of the very useful method of treating the ulcers by touching them with phenol. This treatment is discussed under 'Stomatitis, herpetic,' with no cross reference.

The reviewer offers the following suggestions: It is important to mention under herpes zoster that now and then the condition is symptomatic—e.g. secondary to a metastatic spinal deposit—a very different situation. The reviewer has found steroid therapy useful in certain forms of pancreatitis and in certain stages of hepatic disease (coma). Desoxyribonucleic acid (DNA) is of value in breaking up the fibrinous adhesions of empyemata without causing reactions. The treatment of generalized fungus infections should have found a place now that, owing to broad-spectrum antibiotics and steroids, the incidence of them has risen. A useful tip in connection with extract of male fern is that it should be, given through a Ryle's tube. This medicament is otherwise awful to take as a draught. Tinnitus in the elderly is so common a complaint that it is probably wrong to attribute it all to arteriosclerosis. Syncope from orthostatic hypotension is not rare in normal peoples, and occurs most commonly on rising from lying down, especially after a meal. The dizziness is often delayed for a number of seconds.

F.F.

MIXING OF RACES

Rassenkruising bij de mens. By Dr. J. W. Bruins. Pp. 51. f 1.40. Arnhem: Drukkerij D. Derksen. 1955.

This little book may be added to the bottom of that long list of 'popular' books on race; it is another half-baked result of a mixture of bias, a few scientific facts, and personal 'observations'. Whenever fiction is confused with fact, contradictions arise. The author damns the Nazi 'race hygiene' concept of race 'purity' but he avers that he does not favour 'levelling' of the 3 'primary' races. He attempts to support this by stating that the Nazi confused *race* with *nation*. In effect the reviewer considers that the practices of the Nazi and the views of Dr. Bruins are the same in principle. Furthermore, the concept of 'primary' races was discarded some decades ago. Though admitting that Man's history consists of recurrent continuous admixtures of peoples, the author advises against miscegenation. He acknowledges that admixture does not lead to degeneration; he quotes numerous examples of successful admixture; he warns against certain religious admixtures; he often turns to the Bible for guidance and concludes that it does recognize the right of existence of different races and nowhere prohibits admixture. The author, who is unknown to the reviewer, states that in acknowledging race difference he does not support discrimination—he believes in *pride* of race. Nevertheless he states (in a fashion typical of the conflicting ideas in the rest of the book) that he would rather his daughter married a devout Negro than a White heathen.

This book contains nothing new. For the intellectual South African it is another rendering of a medley of emotional and prejudiced views (here caused by concern of the Indonesian 'infiltration' in Holland) in a pseudo-scientific background, so attempting to lull the reader into a state of general acceptance and belief. This book cannot be recommended except to those who are always looking for fuel to stoke the fires of racialism.

R.S.

CORRESPONDENCE : BRIEWERUBRIEK

THE LATE MR. HAVENGA

To the Editor: The lamented death of the late Mr. N. C. Havenga calls to mind a life-long friendship between 'friend and foe' which had an interesting origin in the early days of the 'Boer War'. Mr. Havenga was wounded several times and after his last engagement,

in which he was severely wounded, he was carried almost dying to a military hospital, where Capt. Orford, of the Royal Army Medical Corps, operated on him with success.

Colonel Orford (father of the late Dr. Margaret Orford of Johannesburg) returned to the Transvaal and took up farming. From England he brought out Sussex cattle and eventually had

a fine herd. Mr. Havenga and he took a keen interest in the breeding of horses and they were often to be found together discussing farming problems.

20 March 1957

Civil Surgeon

ABBREVIATIONS

To the Editor: Abbreviations of medical terms, phrases and even sentences are now a commonplace feature in medical reports and literature. This is nothing new. Abbreviations in pharmacology, chemistry and other sciences are time-honoured and universally accepted.

Abbreviations such as CSF, PUO, ADT, COMS, C/O, BP, LMP, T, P, CNS, Hb, ESR, M/O, TB, TET, X-ray etc. have now become firmly established. New ones are being added to the list every day. These devices are of great use to medical men, public health and laboratory workers etc. and ease their burdens enormously.

Some purists would like to decry this tendency; but the majority of medical men now use abbreviations as a matter of course. The time has therefore come to standardize and give formal recognition to them.

I suggest that your esteemed *Journal* should collect, compile and publish a list of generally accepted abbreviations to serve as a guide.

20 March 1957

Doc Labourer

MEGALOBlastic ANAEMIA OF PREGNANCY

To the Editor: In his paper under this title published on 2 March, Dr. Nel¹ states that only 2 of our 14 cases responded well to treatment with vitamin B₁₂, implying that it was tried in all. We reported in fact that vitamin B₁₂ was given to 4 patients, 2 of whom responded well, while in the other 2 results were inconclusive because folic acid was also used.² I have shown subsequently that 7 cases treated postpartum with vitamin B₁₂ in large doses responded well, but response was poor in 3 others treated similarly before delivery.³ Work at present proceeding in this department indicates that the serum level of vitamin B₁₂, assayed by the method of Hutner *et al.*,⁴ is usually within the normal range in megaloblastic anaemia of pregnancy, but it may be as low as in untreated cases of pernicious anaemia; response to vitamin B₁₂ in such cases is good.

I do not disagree with Dr. Nel when he concludes that there are apparently two types of megaloblastic anaemia of pregnancy judged on response to vitamin B₁₂; in practice the difficulty is to tell which is which. Both folic acid and vitamin B₁₂ could be given, as he suggests. However, in a large series of cases of megaloblastic anaemia associated with pregnancy in Africans and Indians I have not encountered failure to react to folic acid in the absence of infection, and this appears to be the treatment of choice.

E. B. Adams

Department of Medicine
University of Natal
Durban

16 March 1957

1. Nel, R. W. A. (1957): *S. Afr. Med. J.*, **31**, 197.
2. Adams, E. B. and Wilmot, A. J. (1953): *Ibid.*, **27**, 1028.
3. Adams, E. B. (1956): *Brit. Med. J.*, **2**, 398.
4. Hutner, S. H., Bach, M. K. and Ross, G. I. M. (1956): *J. Protozool.*, **3**, 101.

TWO CASES OF PENICILLIN REACTION

To the Editor: For those who are collecting figures of penicillin reactions, two further anaphylactic-type reactions may be of interest.

Between four of us we use about 80 vials of Distaquaine suspension per month, and over the past 3½ years these are the only severe reactions encountered, both occurring within a week.

The first was a young European woman of 21, suffering from meningitis, who had received penicillin previously with no reactions.

The second was a European male, aged 36, with severe sepsis of his mouth following dental extractions.

They both had exactly similar reactions. They both received 3 c.c. of the suspension intramuscularly daily for 4 days, with no ill effect; then, within 5-10 seconds of receiving the 5th injection, they complained of ringing in the ears, dizziness and choking, and cried out, 'Doctor help me; I feel I am dying'. (They looked like death as well.)

They more or less fell into chairs, became cyanosed, confused and spastic and, the man particularly, fought against restraint. Their pulse rates rose sharply to about 120 per minute and they looked alarmingly ill. Breathing became stertorous.

I immediately gave them intravenously one ampoule of Anthisan, and subcutaneously, 1 c.c. of hyperduric adrenalin and 0.5 c.c. of 1 : 1,000 adrenalin. They slowly calmed down over 3-4 minutes. At the end of 5-10 minutes they were apparently normal, but feeling tired. Thereafter recovery was uneventful.

They had an almost complete amnesia for the reaction, except that they remembered the prodromal symptoms, the feeling of choking, and the feeling of impending death.

We always suck back before injections and so I feel that it is most unlikely that the Distaquaine suspension entered the body intravenously. In any case the reaction occurred within a few seconds, which would not have allowed much of the penicillin to have gone into circulation, should it have been inadvertently injected intravenously.

We considered these to be anaphylactic reactions.

J. H. Youngleson

P.O. Box 112
Kokstad
8 March 1957

TREATMENT OF CANCER OF THE BREAST

To the Editor: The Editorial on this subject¹ in the *Journal* of 16 March conveys the impression that while the Halsted operation is a standard operation freely performed practically anywhere, X-ray therapy as advocated by McWhirter is not easily available. Nothing could be further from the truth in South Africa. The equipment required is a 250-kv deep X-ray therapy plant employing heavy filtration and the technique is the essence of simplicity, and certainly does not call for 'more than average radiotherapeutic ability'.

C. J. B. Muller

206 Dumbarton House
Corner of Adderley and Church Streets
Cape Town
18 March 1957

1. Editorial (1957): *S. Afr. Med. J.*, **31**, 243.

POLIOMYELITIS VACCINATION

To the Editor: Would it be possible for the *Journal* to publish an article—perhaps in question-and-answer form—that would serve to clear up some of the problems concerning poliomyelitis vaccine which face the general practitioner.

Following case reports in the daily press, one is continually being asked by anxious parents: Is the vaccine 100% safe; should I have my child inoculated? And the question does rise in one's own mind: Are the reported cases of polio contracted after inoculation coincidental—was the disease incubating at the time of inoculation—or is there any chance of its being due to the vaccine?

Also is it preferable in this country to use the South African vaccine or the Salk vaccine?

Penicillin sensitization seems to be increasingly prevalent. As there is penicillin present in the South African vaccine in traces, is it safe to use this on a child who has already developed facial oedema following a penicillin injection? If not, what safeguards are suggested?

I feel that such an article would be of interest to many of us in the country who look to the *Journal* for guidance.

1 Musson Street
Hermanus
11 March 1957

Fay Liesching

[The queries are answered at page 318 of this issue.—Editor.]

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